BOSSIER CITY RR NE WWTP

EXPANSION & REHABILITATION

BOSSIER CITY PROJECT 10-DQ-06, 10-BI-04 & 10-DQ-07

SUBMITTAL FOR

Communication Cabling, Switches and Accessories (Security Camera System) - Records Storage Building

D-16710-002-C	7/16/15	*Tim Stewart*
Submittal Number	**Date**	**Max Foote Construction**

Certification Statement: By this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and I have reviewed and approved this submittal and checked and coordinated each item with other applicable approved shop drawings and all contract requirements.

Red River & NE WWTP
Expansion & Rehab Project
Bossier City, Louisiana

City Project # 10-DQ-06 & 10-BI-04
MCG# 1002.111.10

Specification Section
16710 - Communication Cabling, Switches and Accessories

Security Camera System Submittal
Revision 1

Customer:
Max Foote Construction Company, Inc.
Mandeville, LA
Subcontract No. 260-17000

Vendor:
Revere Control Systems
2240 Rocky Ridge Road
Birmingham, Alabama 35216
Submittal No. N0575-S-15r1-MIS

Date of Revision:
July 2, 2015

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N0575_RR-NETWORK

N0575_RR-SPB-PLC-060

Red River WWTP Expansion and Rehabilitation Project
NE WWTP Upgrade and Rehabilitation Project
Bossier City, LA

Records Storage Building Submittal Re-Submittal

D-16710-002-A Communication Cabling, Switches and Accessories (Security Camera System)-Records Storage Building

1. BOM has been updated to reflect network card in UPS.

2. Information has been provided in resubmittal.

3. Mid span power modules have been added in resubmittal.

4. Note has been deleted.

5. Surge arrestor has been added.

Red River WWTP Expansion and Rehabilitation Project
NE WWTP Upgrade and Rehabilitation Project
Bossier City, LA

Records Storage Building Submittal

Notes & Exceptions
Specification Section 16721 – Fire Alarm System

1. Whenever possible, we have used the same manufacturer and model numbers used previously on projects for this site.

2. The existing Red River network drawings have been updated for this submittal. Items 62, 142-146 have been added to the BOM for this submittal.

CLOSET CONNECTOR HOUSING

GENERAL

1	Specification Section	:	16710
2	Component Code	:	N/A
3	Tag No.	:	N/A

CLOSET CONNECTOR HOUSING

4	Description	:	Closet Connector Housing (CCH), one rack unit, holds two CCH connector panels
5	Number of Ports	:	Up to 24
6	Fiber Count		Up to 48
7	Mounting	:	Rack 19-in, Rack 23-in, Cabinet-mount

MANUFACTURER & NO.

8	Manufacturer	:	Corning
9	Housing Model No.	:	CCH-01U

Closet Connector Housing (CCH)

one rack unit, holds two CCH connector panels

CORNING

Closet connector housings (CCHs) provide interconnect or cross-connect capabilities between outside plant, riser or distribution cables and opto-electronics. Like other LANscape solutions hardware, the housings accept CCH connector panels. In addition, the housings accept CCH cassettes and CCH modules.
From fiber and cable routing and strain relief, to port labeling and termination, these housings reduce the risk of error that can disrupt networks.

The units are designed for rack mounting in 19-in (48 cm) racks or optional 23-in (58 cm) equipment racks (1.75-in EIA hole spacing). They are available in rack space options of 1U (two panels, cassettes or modules), 2U (four panels, cassettes or modules), 3U (six panels, cassettes or modules) and 4U (12 panels, cassettes or modules). The 1U, 2U and 3U options feature a slide-out tray and see-through, removable top covers. The CCH-04U features a clear door, removable front and rear enclosures and a platinum-colored interior for maximum visibility and access.

Every CCH housing is shipped complete with strain relief brackets, routing clips and guides, and mounting brackets for proper installation. Documentation labels are provided and components can be added as needed to construct a fiber distribution frame for any application. All housings include a removable tinted polycarbonate front door. All size housings have field-installable lock kits available for both front and rear doors.

All CCH housings can also be upgraded for pigtail splicing to full fiber capacity and easy, modular fiber management through the use of CCH Splice Cassettes (CCH-CS), or for easy, modular fiber management when using field-installable connectors through the use of CCH Slack Cassettes (CCH-CF).

Part Number: CCH-01U

Features and Benefits

Interconnect and cross-connect capability
Ideal for field connectorization

Removable, translucent top covers (1U, 2U, 3U), removable rear cover (4U)
Visibility and ease of access for installation, testing, and troubleshooting

Internal and external strain-relief options
Flexibility for installation and moves, adds, and changes (MACs)

Accepts panels, modules, and cassettes
Variety of field-termination options

CORNING

Closet Connector Housing (CCH)

one rack unit, holds two CCH connector panels

Features and Benefits

Adaptable to use as a modular splice housing
Splices are stored and protected in same footprint

Standards

Approvals and Listings	Meets ANSI/TIA/EIA-568A and 606
RoHS	Free of hazardous substances according to RoHS 2002/95/EG
UL-Listed	United States and Canadian safety standards

Specifications

General Specifications	
Application	Enterprise Networks, Data Center, Carrier Networks
Mounting Type	Rack 19-in, Rack 23-in, Cabinet-mount
Product Type	Fiber Optic Hardware
Environment	Indoor
Mounting Technology	Flush mount, Protruding, Recessed
Access Type	Front and rear access slidable
Lockable	Yes

Design - Hardware	
Housing Type	CCH
Housing Color	Black, transparent top cover
Height Unit	1U
Locking Availability	Front or rear
Number of Panels per Housing	Up to 2
Pigtail Length	2.25 m
Panel or Module Type	CCH
Splice Tray Options	CCH Splice Cassette (CCH-CS)
Housing Material	Powder-coated metal and Polycarbonate Tray
Number of Ports	Up to 24
Fiber Count	Up to 48

Closet Connector Housing (CCH)

one rack unit, holds two CCH connector panels

CORNING

Design - Hardware	
Cable entry type	External and Internal strain-relief bracket
Number of splice cassettes	Up to 2
Number of Adapters	Up to 24
Number of pigtails	Up to 48

Mechanical Characteristics	
Dimensions (HxWxD)	4.4 cm x 48.3 cm x 43 cm (1.75 in x 19 in x 17 in)
Weight	3.9 kg

Ordering Information

Part Number	CCH-01U
Product Description	Closet Connector Housing (CCH), one rack unit, holds two CCH connector panels

Shipping Information

Units per Delivery	1/1
Shipping Weight	4.5 kg (10 lb)
Dimensions (HxWxD)	54.61 cm x 57.15 cm x 19.05 cm (21.5 in x 22.5 in x 7.5 in)

RoHS COMPLIANT

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA
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CORNING

CONNECTOR PANEL

GENERAL

1	Specification Section	:	16710
2	Component Code	:	N/A
3	Tag No.	:	N/A

CONNECTOR PANEL

4	Description	:	Closet Connector Housing (CCH) Panel, ST® Compatible adapters, Simplex, 12 F, 62.5 µm multimode (OM1)
5	Fiber Count	:	12
6	Number of Adapters per Panel	:	12

MANUFACTURER & NO.

7	Manufacturer	:	Corning
8	Model No.	:	CCH-CP12-15T

Closet Connector Housing (CCH) Panel, ST® Compatible Adapters

Simplex, 12 F, 62.5 µm multimode (OM1)

CORNING

Corning closet connector housing panels (CCH-CP) are offered in a variety of fiber counts for use with LANscape® solutions hardware products for a “one-size -fits-all” approach. Used with factory-installed or field-installable connectors, these panels provide interconnect or cross-connect capability in a housing at main cross-connects, intermediate cross-connects, telecommunication rooms or work areas. Available with a variety of industry-standard adapter types, the CCH-CP provides an efficient way to securely mate two connectors and offers multimode and single-mode applications.

Part Number: CCH-CP12-15T

Features and Benefits

Universal design approach
One-size-fits-all LANscape® Solutions housings

Broadest range of fiber count and adapter types
Solutions for all needs

Colored icon labeling
Easy connector identification

Part Number: CCH-CP12-15T

CORNING

Closet Connector Housing (CCH) Panel, ST® Compatible Adapters

Simplex, 12 F, 62.5 µm multimode (OM1)

CORNING

Specifications

General Specifications	
Application	Enterprise Networks, Data Center LAN/SAN
Product Type	Panels & Modules
Fiber Category	62.5 µm MM (OM1)

Design - Hardware	
Fiber Count	12
Number of Adapters per Panel	12

Design Adapter	
Adapter Housing Color	Beige
Adapter Housing Material	Metal
Adapter Type	ST® Compatible
Insert Material	Ceramic

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/EG

Ordering Information

Part Number	CCH-CP12-15T
Product Description	Closet Connector Housing (CCH) Panel, ST® Compatible adapters, Simplex, 12 F, 62.5 µm multimode (OM1)

Shipping Information

Units per Delivery	1/1
Package Contents	CCH Adapter Panel with installation guide

CORNING

CORNING

Notes

RoHS COMPLIANT

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA
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CORNING

RACKMOUNT UPS

GENERAL

1	Specification Section	:	16710
2	Component Code	:	N/A
3	Tag No.	:	N/A

RACKMOUNT UPS

4	Type	:	9130 Rackmount UPS
5	Power rating (VA/watts)	:	700/630
6	Input	:	5-15P
7	Output	:	(6) 5-15R
8	Input cord length	:	6 ft.

MANUFACTURER & NO.

9	Manufacturer	:	Eaton
10	Model No.	:	PW9130L700R-XL2U
11	Network Card	:	Network-MS

Eaton 9130 Rackmount UPS

Online power quality and scalable battery runtimes for IT equipment

Eaton 9130 Rackmount features and benefits

Reliability: Online, double-conversion topology ensures that loads are powered with the highest level of protection available. Mission-critical applications benefit from zero transfer time to battery and an internal automatic bypass. In addition, premium power filtering is ideal for harsh environments where harmonics and other voltage disturbances may occur.

Increased battery life: Eaton® offers ABM® technology that increases battery service life by 50 percent. ABM uses an advanced, three-stage charging technique and closely monitors battery health to provide advanced notice when batteries need replacement.

More power: The 9130 allows you to connect more devices and leave room for expanding IT systems by providing up to 28 percent more wattage compared to traditional UPSs.

Manageability:

- Load segmentation: Grouped outlets with remote control capability enable IT managers to cycle or shed loads through a webcard interface or based upon a preprogrammed schedule.
- Eaton's Intelligent Power Manager (IPM): IPM software provides network power management, ensuring data and system integrity. With IPM, you can have access to easy, versatile, remote monitoring and management of multiple devices.

LCD interface: The bright, intuitive LCD user interface simplifies UPS monitoring and management. The user-friendly menu allows you to view all critical UPS information in a single view.

Intelligent Power Software Suite

By integrating the bundled Intelligent Power® Software Suite (IPSS), you can monitor and manage your network power devices. IPSS enables you to:

- Seamlessly integrate with VMware's vCenter™ Server™ virtualization management solution, as well as virtualization platforms such as Citrix® XenServer, Microsoft SCVMM™, Red Hat® and other Xen® open source platforms
- Initiate live migration of virtual machines (VMs) to automatically and transparently migrate them during power disruptions to unaffected devices with systems such as VMware vMotion™ and Microsoft Live Migration
- Gracefully shutdown computers, VMs and host servers during an extended power outage

To learn more, please visit: **Eaton.com/intelligentpower**

Services and support

Eaton provides 24x7 product support. From battery replacement to full UPS service plans, Eaton has one of the top service models in the industry.

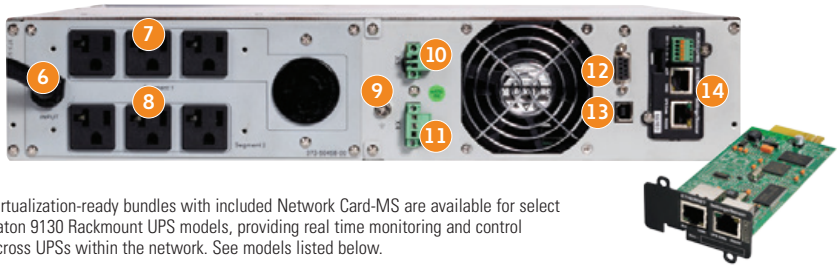
Powering Business Worldwide

Front panel overview

1. Rackmounting ears
2. Connect EBMs via front panel
3. Hot-swappable batteries
4. 4-button menu with LCD interface and LED indicators
5. 2U rack height

Back panel overview

Model PW9130L2000R-XL2U (2 kVA, 120V output, 50/60 Hz)



*Virtualization-ready bundles with included Network Card-MS are available for select Eaton 9130 Rackmount UPS models, providing real time monitoring and control across UPSs within the network. See models listed below.

6. 6 ft. (1.8 m) input cord with 5-20P
7. Load segment 1 with (3) 5-20R and (1) L5-20R
8. Load segment 2 with (3) 5-20R
9. Ground bonding screw
10. RPO (remote power off) port
11. Standard relay output contact
12. RS-232 port
13. USB port
14. Communications bay with optional Network-MS card*

9130 Rackmount model selection guide

Catalog number	Power rating (VA/watts)	Input	Output	Dimensions (HxWxD, in.)	Weight (lb.)
North American models: 120V, 50/60 Hz					
PW9130L700R-XL2U	700/630	5-15P[1]	(6) 5-15R	3.4 (2U) x 17.2 x 17.7	35.3
PW9130L1000R-XL2U	1000/900	5-15P[1]	(6) 5-15R	3.4 (2U) x 17.2 x 17.7	35.3
PW9130L1500R-XL2U	1500/1350	5-15P[1]	(6) 5-15R	3.4 (2U) x 17.2 x 17.7	43.0
PW9130L2000R-XL2U	2000/1800	5-20P[1]	(6) 5-20R, (1) L5-20R	3.4 (2U) x 17.2 x 23.6	63.9
PW9130L2500R-XL2U	2500/2250	L5-30P[1]	(6) 5-20R, (1) L5-30R	3.4 (2U) x 17.2 x 23.6	65.0
PW9130L3000R-XL2U	3000/2700	L5-30P[1]	(6) 5-20R, (1) L5-30R	3.4 (2U) x 17.2 x 23.6	65.0
North American models: 120V, 50/60 Hz Virtualization-ready bundles with Network Card-MS					
PW9130L1500R-XL2UN	1500/1350	5-15P[1]	(6) 5-15R	3.4 (2U) x 17.3 x 16.9	43.0
PW9130L2000R-XL2UN	2000/1800	5-20P[1]	(6) 5-20R, (1) L5-20R	3.4 (2U) x 17.3 x 22.6	63.9
PW9130L3000R-XL2UN	3000/2700	L5-30P[1]	(6) 5-20R, (1) L5-30R	3.4 (2U) x 17.3 x 22.6	65.0
Global models: 208V, 50/60 Hz					
PW9130G3000R-XL2U	3000/2700	L6-20P[1]	1) L6-30R, (1) L6-20R, (2) 6-20R	3.4 (2U) x 17.2 x 23.6	65.0
PW9130G3000R-XL2UEU	3000/2700	L6-20P[1]	(8) C13, (1) C19	3.4 (2U) x 17.2 x 23.6	65.0
International models: 230V, 50/60 Hz					
PW9130i1000R-XL2U	1000/900	C14[2]	(6) C13	3.4 (2U) x 17.2 x 17.7	35.3
PW9130i1500R-XL2U	1500/1350	C14[2]	(6) C13	3.4 (2U) x 17.2 x 17.7	43.0
PW9130i2000R-XL2U	2000/1800	C14[2]	(8) C13, (1) C19	3.4 (2U) x 17.2 x 23.6	63.9
PW9130i3000R-XL2U	3000/2700	C20[3]	(8) C13, (1) C19	3.4 (2U) x 17.2 x 23.6	65.0
Extended battery modules					
PW9130N1000R-EBM2U	Works with 700/1000 VA models, where available			3.4 (2U) x 17.2 x 17.7	48.7
PW9130N1500R-EBM2U	Works with 1500 VA models			3.4 (2U) x 17.2 x 17.7	62.0
PW9130N3000R-EBM2U	Works with 2000-3000 VA models, where available			3.4 (2U) x 17.2 x 23.6	90.6

Rackmount bypass accessories

Catalog number	Style number	Input plug	Breaker	Max kW	Function	Cord (ft.)	Orientation	Receptacles	Dimensions (HxWxD, in.)
EHBPL1500R-PDU1U	58115	5-15P	None	1.44	BA	8	2U	(6) 5-15R	2.1 x 17.3 x 3.8
EHBPL2000R-PDU1U	58120	5-20P	None	1.92	BA	8	2U	(6) 5-15R	2.1 x 17.3 x 3.8
EHBPL3000R-PDU1U	58130	L5-30P	(2) 20A	2.88	BA	3.3	2U	(5) 5-20R	2.1 x 17.3 x 3.8
EHBPI3000R-PDU1UIEC	68433	C20	(1) 20A	3000	BA		2U	(1) C19, (6) C13	2.1 x 17.3 x 4.8

1. Input cord length is 6 ft.
2. C14, w/ detachable L6-20P.
3. C20, w/ detachable L6-20P.

Additional notes:
TAA-compliant models: Eaton now offers TAA-compliant models for the 9130. Please visit Eaton.com/taaups for model specific information.

Other available options
– Environmental Monitoring Probe
– PowerPass Distribution Modules
– 1U HotSwap Maintenance Bypass
Visit Eaton.com/9130RM for details.

For complete battery runtime information and to interact with the 9130 Rackmount UPS, please visit: **Eaton.com/9130RM**

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AMERICA-USA

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Contact me about this UPS

→ See All Eaton 9130 RM UPS Documentation

→ Back to Family Page

103006447-6591

The Eaton 9130 Rackmount UPS delivers online power quality and scalable battery runtimes for rack servers, voice and data networks, storage systems and other IT equipment.

List Pricing

List Price*	$989

General

Topology	Online, double-conversion
Configuration	Rackmount
Catalog Number	PW9130L700R-XL2U
Color	Black
Rating (VA/Watts)	700/630
Diagnostics	Full system self-test
UPS Bypass	Automatic bypass
Dimensions (H x W x D, inches)	3.4 x 17.2 x 16.9
Weight (lbs)	35.3
Warranty	Two-year factory warranty
Rail Kit Included	Included with all rackmount units
Remote Emergency Power off (REPO)	Emergency shutdown control through the REPO port
Contents (Ships with the following items)	1 ready-to-go UPS Software Suite CD USB Cable User Guide Quick Start Instructions 4-post Rail Kit
Efficiency	>95% in high-efficiency mode; >86% in online mode

Electrical Input

Connection	(1) NEMA 5-15P

Input Cord	6 ft.
Input Voltage Range	80-144 Vac
Nominal Voltage	120V
Frequency	50/60 Hz
Frequency Range	45–65 Hz
Nominal Current	5.8 A
Breaker Ratings	15A
Generator Compatability	Yes

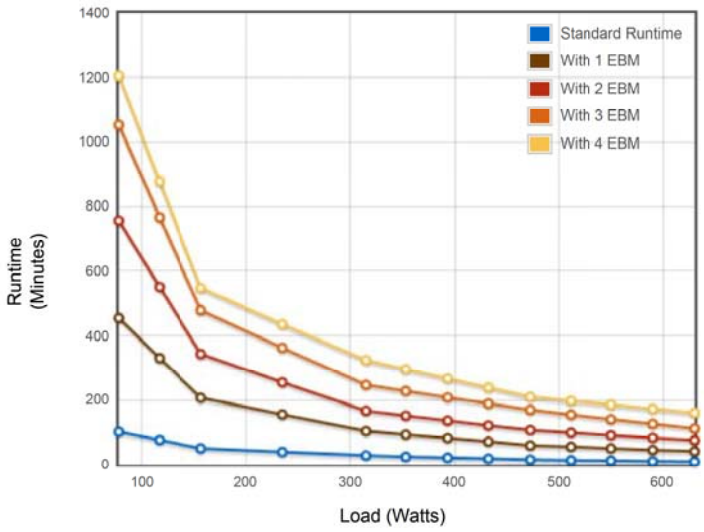
Electrical Output

Output Receptacles	(6) NEMA 5-15R

On Utility Voltage Regulation	±3% of nominal

On Battery Voltage Regulation	±3% of nominal
Voltage Wave Shape (On Battery)	Sine wave
Power Factor	0.9
Frequency Regulation	±3% Hz online
Load Crest Factor	3 to 1

Battery



Battery runtimes are approximate and may vary with equipment, configuration, battery age, temperature, etc.

Optional Extended Battery Module	PW9130N1000R-EBM2U
Maximum number of extended battery modules (EBM)	4
Battery Type	36 Vdc; (3) 12V, 9 Ah
Battery Replacement	Hot-swappable internal and external batteries
Start On Battery	Allows start of UPS without utility input
Recharge Time	Internal batteries: 3 hours. 1 EBM: 9 hours; 2 EBM: 15 hours; 3 EBM: 21 hours; 4 EBM: 27 hours

Communications

User Interface	Graphical LCD with blue backlight and text in English, French, German, Russian and Spanish
LEDs	Four status-indicating LEDs
Communication Ports	(1) USB, (1) RS-232 serial, Relay output (common alarm standard)
Communications Slot	Optional communication slots (BD Slot)
Optional Communication Cards	SNMP/Web card for direct control and monitoring in SNMP-based networks, monitoring of UPS status and meters through Web browser interface Relay card for integration to industrial environment and building management systems. remote shutdown for IBM AS/400 systems
Power Management Software	Bundled software suite CD

Environmental & Standards

RoHS Compliance	Yes
Heat Dissipation (BTU)	Line: 350, Bat: 554
Audible Noise	<50 dB
Operating Temperature	0°C to 40°C(32°F to 104°F) in online mode, with linear derating for altitude. NOTE:Thermal protection switches load to bypass in case of overheating
Safety markings	UL, cUL, VCCI
EMC Markings	FCC Class B, EN55022 Class B
Storage Temperature	-20°C (-4°F) to +40°C (104°F) with batteries and -25°C (-13°F) to +55°C (131 °F) without batteries
Relative Humidity	5–90% non-condensing

Options

Services

Scheduled Onsite Services and Monitoring	Part Number
Onsite 7x24 Startup	SU05NXXX-6009UC
Onsite UPS PM 7x24	0005NXXX-6009UC
eNotify Remote Monitoring Per Year	XXXXNEXX-6009UC
Scheduled Assembly Service 7x24	AS00NXXX-6009UC
Extended Warranty Advanced Exchange Coverage for UPS (includes Battery in UPS)	**Part Number**
Warranty-3: 3-year-total warranty (UPS) for new product purchase	9SW3Y-0700UC
Warranty-5: 5-year-total warranty (UPS) for new product purchase	9SW5Y-0700UC
Extended Warranty Coverage for EBM (External Battery Module)	**Part Number**
Warranty-3: 3-year- total warranty (EBM)	9SW3Y-3000BC
Warranty-5: 5-year- total warranty (EBM)	9SW5Y-3000BC

Batteries

Option	Part Number
Eaton 9130 1000 Rack EBM 2U 2U Extended Battery Module (EBM) giving additional runtime for Eaton 9130 700 and 1000 rack UPSs - up to 4 EBMs can be attached to each UPS	PW9130N1000R-EBM2U

Power Management Connectivity

Option	Part Number
Network and MODBUS Card-MS Provides continuous, reliable and accurate remote monitoring of UPS systems	MODBUS-MS
Network Card-MS Provides real time monitoring and control across UPSs in your network	Network-MS
Environmental Monitoring Probe Allows remote monitoring of temperature, humidity and two other contact devices (requires Network Card-MS)	116750224-001

Power Management Software

UPS and ePDU Supervisory Software	Part Number
Intelligent Power Manager Enables monitoring and management of multiple network power devices and integrates seamlessly with VMware's vCenter Server and Microsoft's SCVMM. View demo	free download 66925 (Silver) 66926 (Gold)

UPS Protection Software	Part Number
Intelligent Power Protector Provides automatic, graceful shutdown of PCs, servers and virtual machines during extended power outages. Compatible with ESXi, Hyper-V, Xen and KVM. View demo	free download

Power Distribution and Bypass

Option	Part Number
FlexPDU 15 1U This FlexPDU provides twelve additional 5-15R output receptacles for the UPS. It is equipped with a 5-15P that plugs into the UPS	EFLXL1500R-PDU1U
HotSwap MBP 1500 The HotSwap Maintenance Bypass allows you to exchange or service the UPS without shutting down the connected load.	EHBPL1500R-PDU1U
Basic ePDU Provides (18) additional output 5-15R output receptacles in a vertical 0U form factor.	ePBZ98
	PW101MI0U233
Monitored ePDU ePDU, 1U, Monitored Ethernet, input 5-15P, output (12) 5-15R	PW101MI1U221
Switched ePDU ePDU, 0U, Switched, input 5-15P, output (16) 5-15R	PW101SW0U224

Mounting Hardware

Option	Part Number
2-post rail kit 2-post rail kit for 9130 rackmount. 5P 2U models and 5PX 2U and 3U models	103007018-5591

Racks and Enclosures

Option	Part Number
Eaton S-Series Enclosure Eaton S-Series Enclosures support a broad range of rack accessories, as well as power distribution, management and protection products, to provide a proven platform that you can depend on to support your critical IT operations. Available in 42U and 48U heights.	

* List Prices are not a reflection of the actual product Street Price. Check with your Eaton reseller or partner to get actual pricing.

SERVER RACK

GENERAL

1	Specification Section	:	16710
2	Component Code	:	N/A
3	Tag No.	:	N/A

SERVER RACK

4	Type	:	ACCESSPLUS® II Double-Hinge, Type 1
5	Rack Units	:	26
6	Material	:	Pretreated steel coated with RAL 9005 black light-textured, low-gloss polyester powder paint

MANUFACTURER & NO.

7	Manufacturer	:	Hoffman
8	Model No.	:	EWMW482425
9	Cable Management No.	:	Black Box 37803-R2

ACCESSPLUS® II Double-Hinge

ACCESSPLUS® II Double-Hinge, Type 1

Industry Standards

UL 508A; Type 1; File No. E61997
cUL Listed per CSA C22.2 No. 182.4; File No. E230874

EIA 310-D
NEMA/EEMAC Type 1
EIC 60529 IP20
Per BICSI TDMM Tenth edition, Chapter 7,
Telecommunication Enclosures (TE)

Application

ACCESSPLUS® II Cabinets provide security, equipment access, cooling and support for network and other 19-in. rack-mount equipment. The cabinet has three components: front door, center section and wall section.

Features

- Double-hinged for easy equipment access; center section provides 19-in. rack mounting per EIA universal spacing and is accessed through the front door or swing the center section away from the wall section for rear access
- Round corners; no sharp edges
- Front door has either a solid steel or hardened, tinted safety-glass window door for superior scratch resistance
- Center section easily removed from rear section; tool-less one-person installation possible
- Self-grounding, plated steel rack angles fully adjustable within center section
- Wall section provides cable entry and cable management with knockouts or gland plates
- Gland plate model provides easy retrofit and fast installation and allows for pre-terminated cables or pre-wired patch panels; no need to re-terminate and test
- Self-locking center-to-wall section latches in two locations
- Front access to all latches (no exposed side latches); cabinet can be installed tightly in corners
- Vented sides provide cross flow ventilation to improve heat dissipation
- Vertical cable manager included in 28-in.-wide models
- A full line of accessories is available

Specifications

Front Door (window or solid steel)
- Composite frame (injection molded top and bottom with extruded composite sides)
- 140-degree opening door
- Field-reversible (left or right) hinge
- Quarter-turn key lock, two keys included
- Window door is scratch-resistant 1/4-in. tinted safety glass
- Solid door has 16 gauge steel insert with matching black finish

Center Section
- Welded 14 gauge steel
- Solid top of center sections provides protection against falling debris
- Ventilated sides (to which fans can be added)
- Self-latching closure connects center section to wall section
- Self-alignment ramp supports center section to wall section
- Heavy duty center-to-rear section hinge with quick-release self-retained hinge pin eases wall installation

Rack-Mounting Angles
- 12 gauge, plated steel
- EIA universal spaced 19-in. rack-mounting holes
- RU marked from bottom to top
- Tapped 10-32 holes, 20 mounting screws included

Rear Wall Section
- Welded 14 gauge steel
- Radius corners; no sharp edges
- Available with knockouts or gland plates
- Raised pads for accessory mounting
- Cable tie-down points for cable management
- Keyhole mounting holes allow wall section to be mounted over fasteners and eases installation
- Three cable-entry grommets

Finish

Pretreated steel coated with RAL 9005 black light-textured, low-gloss polyester powder paint. Other finishes available—contact Hoffman Customer Service.

Bulletin: DWDH1

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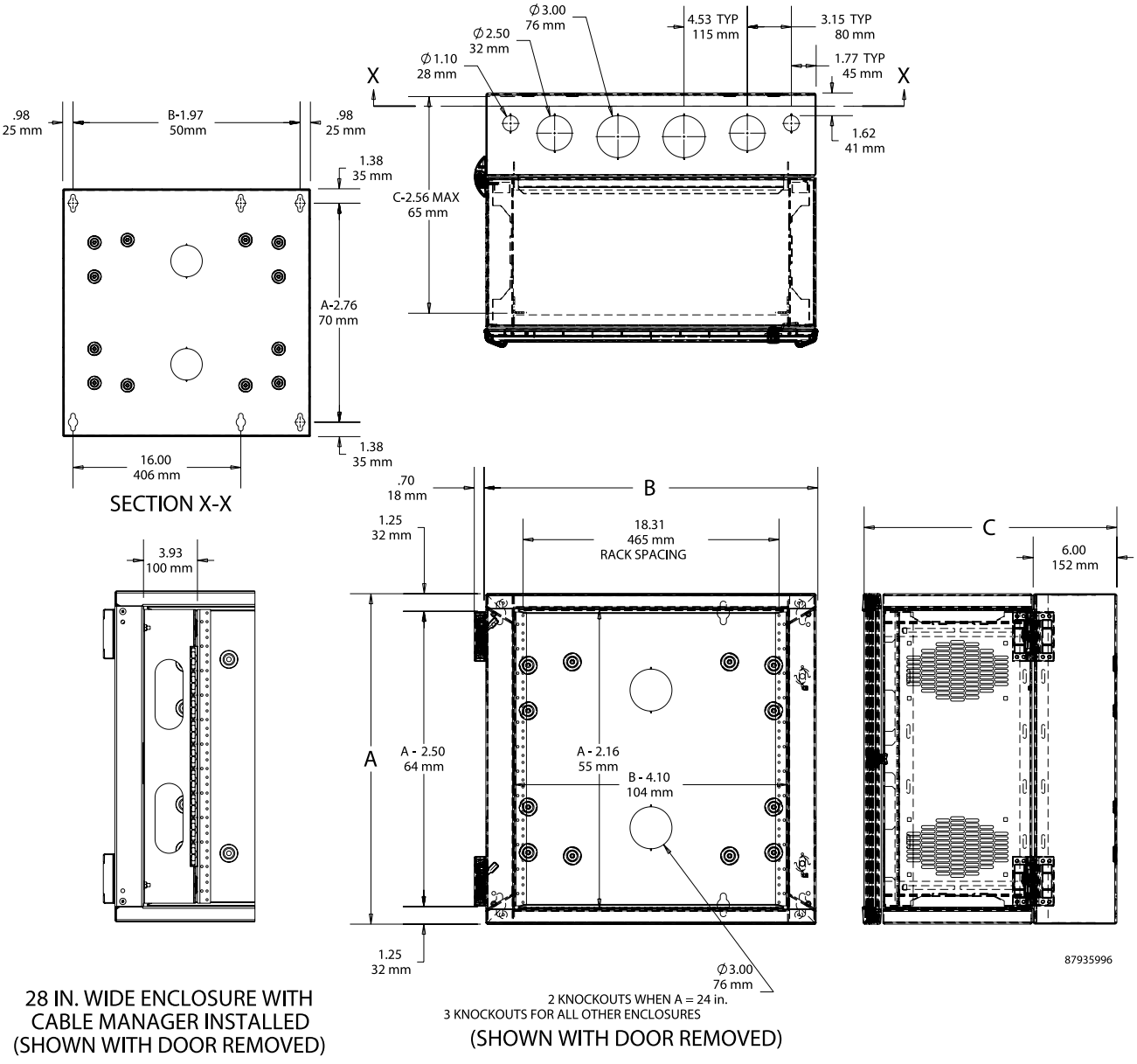
ACCESSPLUS® II Double-Hinge

Standard Product **Window Door**

Catalog Number	AxBxC in.	AxBxC mm	Rack Units	Additional Rack Angles (S=Square Hole) (T=Tapped Hole)
EWMW242418	23.60 x 23.62 x 18.20	600 x 600 x 462	12	EWMR24T or EWMR24S
EWMW362418	36.02 x 23.62 x 18.20	915 x 600 x 462	19	EWMR36T or EWMR36S
EWMW482418	48.03 x 23.62 x 18.20	1220 x 600 x 462	26	EWMR48T or EWMR48S
EWMW602418	60.04 x 23.62 x 18.20	1525 x 600 x 462	32	EWMR60T or EWMR60S
EWMW722418	72.05 x 23.62 x 18.20	1830 x 600 x 462	39	EWMR72T or EWMR72S
EWMW242425	23.62 x 23.62 x 25.09	600 x 600 x 637	12	EWMR24T or EWMR24S
EWMW362425	36.02 x 23.62 x 25.09	915 x 600 x 637	19	EWMR36T or EWMR36S
EWMW482425	48.03 x 23.62 x 25.09	1220 x 600 x 637	26	EWMR48T or EWMR48S
EWMW602425	60.04 x 23.62 x 25.09	1525 x 600 x 637	32	EWMR60T or EWMR60S
EWMW722425	72.05 x 23.62 x 25.09	1830 x 600 x 637	39	EWMR72T or EWMR72S
EWMW242430	23.62 x 23.62 x 30.01	600 x 600 x 762	12	EWMR24T or EWMR24S
EWMW362430	36.02 x 23.62 x 30.01	915 x 600 x 762	19	EWMR36T or EWMR36S
EWMW482430	48.03 x 23.62 x 30.01	1220 x 600 x 762	26	EWMR48T or EWMR48S

B dimension does not include wall-to-center section hinge.



28 IN. WIDE ENCLOSURE WITH CABLE MANAGER INSTALLED (SHOWN WITH DOOR REMOVED)

2 KNOCKOUTS WHEN A = 24 in.
3 KNOCKOUTS FOR ALL OTHER ENCLOSURES
(SHOWN WITH DOOR REMOVED)

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United AUTOMATION
• Fire • Security • Sound

Security Camera Systems

For

Record Storage Building
Red River WWTP
Bossier City, LA

Revere Control Systems
2240 Rocky Ridge Road
Birmingham, AL 35216

Engineer
Manchac Consulting Group, Inc.
Quail Run Drive, Suite A
Baton Rouge, LA. 70808

Phone (318) 397-0208 • Fax (318) 397-0140
P. O. Box 607 • West Monroe, Louisiana 71294
315 Wallace Dean Road • West Monroe, Louisiana 71291

Waste Water System Improvements

Record Storage Building

Red River WWTP

- **Switch REC-NSW-080 (qty: 1)**
  Switch has 16 POE+ ports
  Redundant power supplies
  SFP Gigabit module (qty: 2)
- **Cameras**
  Axis Q-6042 (qty: 6) includes midspan

HIRSCHMANN
A BELDEN BRAND

Product information
MACH104-16TX-PoEP -R

Industrial Ethernet:Workgroup Switches:Gigabit/10 Gigabit Ethernet PoE Workgroup Switches, 22-24 Ports:MACH104-16TX-PoEP -R

http://e-catalog.hirschmann.com/link/57078-24455-49848-85613-158780/en/conf/uistate

Name	MACH104-16TX-PoEP -R
	20 Port Gigabit Ethernet Industrial Workgroup Switch (16 x GE TX PoEPlus Ports, 4 x GE SFP combo Ports), managed, Software Layer 2 Professional, Store-and-Forward-Switching, IPv6 Ready
Delivery informations	
Availability	available
Product description	
Description	20 Port Gigabit Ethernet Industrial Workgroup Switch (16 x GE TX PoEPlus Ports, 4 x GE SFP combo Ports), managed, Software Layer 2 Professional, Store-and-Forward-Switching, IPv6 Ready
Port type and quantity	20 Ports geamt; 16 x (10/100/1000 BASE-TX, RJ45) PoEPlus und 4 x Gigabit Combo Ports (10/100/1000 BASE-TX, RJ45 oder 100/1000 BASE-FX, SFP)
Type	MACH104-16TX-PoEP -R
Order No.	942 026-001
More Interfaces	
Power supply/signaling contact	1 x terminal block 2-pins, contact manually or automatically (max. 1 A, 24 V DC or 24 V AC)
V.24 interface	1 x RJ11 socket, serial interface for device configuration
USB interface	1 x USB to connect the AutoConfiguration Adapter ACA21-USB
Network size - length of cable	
Twisted pair (TP)	0 m ... 100 m
Multimode fiber (MM) 50/125 µm	see SFP LWL-Module M-FAST SFP-MM/LC and SFP LWL-Module M-SFP-SX/LC
Multimode fiber (MM) 62.5/125 µm	see SFP LWL-Module M-FAST SFP-MM/LC and SFP LWL-Module M-SFP-SX/LC
Single mode fiber (SM) 9/125 µm	see SFP LWL-Module M-FAST SFP-SM/LC und SFP LWL-Module M-SFP-LX/LC
Single mode fiber (LH) 9/125 µm (long haul transceiver)	see SFP LWL-Module M-FAST SFP-SM+/LC
10G-Multimode fiber (MM) 50/125 µm	n/a
10G-Single mode fiber (SM) 9/125 µm	n/a
Network size - cascadibility	
Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	50 (reconfiguration time < 0.3 sec.)
Power requirements	
Operating voltage	100-240 VAC, 50-60 Hz (redundant)
Heat dissipation	119 Btu (IT) h
Heat dissipation at max. PoE power	235 Btu (IT) h
Power consumption	35 W
Software	
Management	serial Interface, web interface, SNMP V1/V2, HiVision file transfer SW HTTP/TFTP, LLDP-MED
Diagnostics	LEDs, log-file, syslog, relay contact, RMON, port mirroring 1:1 and n:1, egress/ingress traffic configurable, topology discovery 802.1AB, cable tester (TX), address conflict detection, network error detection, SFP diagnostic [temperature, optical input and output power (µW and dBm)], Trap for configuration saving and changing, duplex mismatch detection, disable learning, Port Monitor
Configuration	Comand line interface (CLI), TELNET, BootP, DHCP, DHCP option 82, HIDiscovery, easy device exchange with auto-configuration adapter ACA21-USB (automatic software and/or configuration upload), automatic script load from ACA21, integrated DHCP server per port, DHCP relay, automatic invalid configuration undo, Offline Configuration, SFP Whitelist, ARC automatic ring configuration (MRP), automatic port shutdown (link flapping), configuration signature (water marking), overload detection
Security	ACL/QoS, ACL Layer 4 fragment support, Port Security (IP und MAC) with multiple addresses (MAC 50 per port), SNMP V3, SSH, Authentication (IEEE802.1x), 802.1x Multi Cliant Authentication, Guest VLAN and Unauthenticated VLAN, Port based Radius VLAN assignment, MAC notification
Redundancy functions	HIPER-Ring, MRP, MSTP, RSTP - IEEE802.1D-2004, MRP and RSTP gleichzeitig, Link Aggregation
Filter	QoS 8 classes, priorisation (IEEE 802.1D/p), VLAN (IEEE 802.1Q), Voice VLAN, shared VLAN learning, Q-in-Q double VLAN tagging, multicast IGMP v1/v2/v3, (snooping/querier), multicast detection unknown multicast, broadcast-, unicast-, multicast limiter, fast aging, GMRP IEEE 802.1D, Jumbo Frame Support,

Industrial Ethernet:Workgroup Switches:Gigabit/10 Gigabit Ethernet PoE Workgroup Switches, 22-24 Ports:MACH104-16TX-PoEP -R

http://e-catalog.hirschmann.com/link/57078-24455-49848-85613-158780/en/conf/uistate

	Industrial Profiles, EtherNet/IP und PROFINET (2.2 PDEV, GSDML Stand-alone generator, automatic device exchange) profiles included, configuration and diagnostic via automation, software tools like e.g. STEP7, oder Control Logix IEC61850 protocol (MMS Server, Switch Model)
Time synchronisation	PTP IEEE 1588 v1/v2 Boundary and Transparent Clock hardware time stamping with accuracies of 30ns, SNTP server, realtime clock with energy buffer
Flow control	Flow Control 802.3x, Port Priority 802.1D/p, Priority (TOS/DIFFSERV), Prio (MAC/IP), Prio Mapping (TOS Layer2), Traffic Shaping (Unicast, Multicast, Broadcast), Ingress / Egress
Ambient conditions	
Operating temperature	0 °C ... 50 °C
Storage/transport temperature	-20 °C ... 85 °C
Relative humidity (non-condensing)	10 % ... 95 %
MTBF	n/a
Mechanical construction	
Dimensions (W x H x D)	448 mm x 44 mm x 345 mm
Mounting	19" control cabinet
Weight	4500 g
Protection class	IP20
Mechanical stability	
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
IEC 60068-2-6 vibration	3.5 mm, 5–8.4 Hz, 10 cycles, 1 octave/min; 1 g, 8.4–150 Hz, 10 cycles, 1 octave/min
EMC interference immunity	
EN 61000-4-2 electrostatic discharge (ESD)	4 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	10 V/m (80-3000 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 4 kV data line
EN 61000-4-6 conducted immunity	10 V (150 kHz-80 MHz)
EMC emitted immunity	
FCC CFR47 Part 15	FCC 47 CFR Part 15 Class A
EN 55022	EN 55022 Class A
Approvals	
Safety of industrial control equipment	cUL 508
Safety of information technology equipment	cUL 60950-1
Scope of delivery and accessories	
Scope of delivery	Device, terminal block for signal contact, 2 brackets with fasteningscrews (pre-assembled), housing feet - stick-on, non-heating appliance cable - Euro model, CD-ROM with user manual, installation user manual
Accessories to order separately	Fast Ethernet SFP modules, Gigabit Ethernet SFP modules, autoConfiguration Adapter ACA21-USB, terminal cable, Industrial Hivision Network Management software

For more information please contact:
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Stuttgarter Strasse 45-51
72654 Neckartenzlingen
Germany
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The complete information and data were available on user documentation. Mandatory information can only be obtained by a concrete query.

The MACH4000 SFP Fiber Optic Fast-, Gigabit- and 10Gigabit- Ethernet Transceivers

SFP fiber optic Fast-Ethernet transceiver				
Description SFP fiber optic Fast-Ethernet transceiver				
Type	**M-FAST SFP-LH/LC**	**M-FAST SFP-SM+/LC**	**M-FAST SFP-SM/LC**	**M-FAST SFP-MM/LC**
Order number	943 868-001	943 867-001	943 866-001	943 865-001
Network size – length of cable				
Multimode fiber (MM) 50/125 µm (62.5/125 µm)				5km (4 km at 62.5/125 µm)
Single mode fiber (SM) 9/125 µm	40 – 104 km	25 – 65 km	25 km	
Technical data				
Port type and quantity	1x100BASE-FX with LC-Connector			
Diagnostics	Optical input- and output power, transceiver temperature (diagnostic not for M-FAST SFP-MM/LC)			
Operating voltage	Power supply via media module			
Power consumption	1W			
Operating temperature	0° C up to + 60° C			

SFP fiber optic Gigabit-Ethernet transceiver				
Description SFP fiber optic Gigabit-Ethernet transceiver				
Type	**M-SFP-LH+/LC**	**M-SFP-LH/LC**	**M-SFP-LX/LC**	**M-SFP-SX/LC**
Order number	943 049-001	943 042-001	943 015-001	943 014-001
Network size – length of cable				
Multimode fiber (MM) 50/125 µm (62.5/125 µm)				550m (275m at 62.5/125 µm)
Single mode fiber (SM) 9/125 µm	60 –120 km	24 – 72 km	20 km	
Technical data				
Port type and quantity	1x1000BASE-SX with LC-Connector			
Diagnostics	Optical input- and output power, transceiver temperature			
Operating voltage	Power supply via media module			
Power consumption	1W			
Operating temperature	0° C up to + 60° C			

XFP fiber optic 10Gigabit-Ethernet transceiver				
Description XFP fiber optic 10Gigabit-Ethernet transceiver				
Type	**M-XFP-ZR/LC**	**M-XFP-ER/LC**	**M-XFP-LR/LC**	**M-XFP-SR/LC**
Order number	943 921-001	943 920-001	943 919-001	943 917-001
Network size – length of cable				
Multimode fiber (MM) 50/125 µm (62.5/125 µm)				300m (26m at 62.5/125 µm)
Single mode fiber (SM) 9/125 µm	40 –80 km	10 – 40 km	10 km	
Technical data				
Port type and quantity	1x10GBASE-SX with LC-Connector			
Diagnostics	Optical input- and output power, transceiver temperature			
Operating voltage	Power supply via media module			
Power consumption	3W			
Operating temperature	0° C up to + 60° C			

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DATASHEET

AXIS Q6042 PTZ Dome Network Camera

Indoor, high-speed PTZ dome with 36x zoom

- > 36x optical zoom and Extended D1
- > IP52-rated protection against dust and dripping water
- > Shock detection
- > Enhanced intelligent video
- > PoE+

AXIS Q6042 is an advanced indoor PTZ dome, offering higher resolution than normal D1, 36x optical zoom, and fast and precise pan/tilt performance for wide area coverage and great detail when zooming in. It is ideal for airports, train stations, arenas, shopping malls and warehouses.

Supporting round-the-clock pan/tilt/zoom operation, the robust AXIS Q6042 can be automatically directed to 256 preset positions using guard tour. With endless 360° pan and high zoom, the camera can monitor an extremely wide area and provide detailed surveillance. The camera's adjustable day/night functionality ensures high image quality even in low light conditions.

AXIS Q6042 has IP52-rated protection against dust and dripping water, and support for Power over Ethernet Plus (IEEE 802.3at) using the supplied High PoE midspan. The PTZ dome also has shock detection, which mechanically detects and triggers an alarm if the camera has been hit. In vibrating conditions, the camera's electronic image stabilization reduces the effects of camera vibrations on the view to deliver clearer video.

AXIS Q6042's built-in video analytics include Active Gatekeeper, which enables the camera to automatically move to a preset position when motion is detected in a pre-defined area, and track the detected object. The camera also has substantial capacity for third-party intelligent video applications.

With an optional multi-connector cable, AXIS Q6042 supports two-way audio, I/O ports for external devices and AC/DC power. The camera has a built-in memory card slot for local storage of recordings.

Technical Specifications - AXIS Q6042 PTZ Dome Network Camera

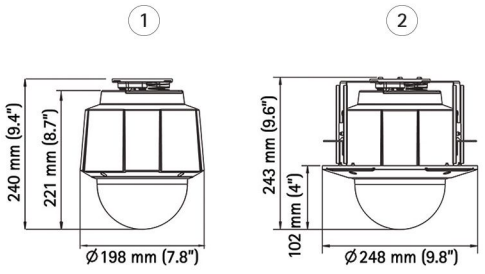
Models	**AXIS Q6042** 50 Hz, **AXIS Q6042** 60 Hz
Camera	
Image sensor	1/4" ExView HAD progressive scan CCD
Lens	f=3.3 – 119 mm, F1.4 – 4.2, autofocus Horizontal angle of view: 57.2° - 1.7°
Day and night	Automatically removable infrared-cut filter
Minimum illumination	Color: 0.5 lux at 30 IRE F1.4 B/W: 0.008 lux at 30 IRE F1.4
Shutter time	1/30000 s to 1.5 s (50 Hz),1/30000 s to 0.5 s (60 Hz)
Pan/Tilt/Zoom	Pan: 360° endless, 0.05° – 450°/s Tilt: 180°, 0.05° – 450°/s 36x optical zoom and 12x digital zoom, total 432x zoom E-flip, 256 presets, Tour recording, Guard tour, Control queue, On-screen directional indicator
Video	
Video compression	H.264 Main and Baseline Profiles (MPEG-4 Part 10/AVC) Motion JPEG
Resolutions	Extended D1 736x576 to 176x144 (50 Hz) Extended D1 752x480 to 176x120 (60 Hz)
Frame rate	H.264: Up to 25/30 fps (50/60 Hz) in all resolutions Motion JPEG: Up to 25/30 fps (50/60 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Controllable frame rate and bandwidth; VBR/CBR H.264
Image settings	Wide dynamic range (WDR), Electronic image stabilization, Manual shutter time, Compression, Color, Brightness, Sharpness, White balance, Exposure control, Exposure zones, Backlight compensation, Fine tuning of behavior at low light, Rotation, Text and image overlay, 32 individual 3D privacy masks, Image freeze on PTZ
Audio	
Audio streaming	Two-way
Audio compression	AAC-LC 8/16 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz Configurable bit rate
Audio input/output	Requires multi-connector cable (sold separately) for external microphone or line input, and line output
Network	
Security	Password protection, IP address filtering, HTTPS[a] encryption, IEEE 802.1X[a] network access control, Digest authentication, User access log
Supported protocols	IPv4/v6, HTTP, HTTPS[a], SSL/TLS[a], QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS
System integration	
Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *www.axis.com* AXIS Video Hosting System (AVHS) with One-Click Camera Connection ONVIF Profile S; specifications at *www.onvif.org*
Intelligent video	Video motion detection, Autotracking, Active Gatekeeper, AXIS Camera Application Platform enabling installation of additional applications
Event triggers	Video motion detection, Audio detection, Shock detection, Fan, External input, Manual trigger, Autotracking, PTZ moving, PTZ preset, Edge storage events, AXIS Camera Application Platform
Event actions	File upload: FTP, HTTP, network share and email Notification: email, HTTP and TCP External output, PTZ preset, Guard tour, Play audio clip, Video and audio recording to edge storage, Autotracking, Day/night mode, Pre- and post-alarm video buffering
Built-in installation aids	Pixel counter
General	
Casing	IP52-rated metal casing (aluminum), acrylic (PMMA) clear dome
Memory	512 MB RAM, 128 MB Flash
Power	Power over Ethernet Plus (PoE+) IEEE 802.3at, max. 30 W AXIS T8123 High PoE midspan 1-port: 100-240 V AC, max. 37 W 24–34 V DC, max. 19 W; 20–24 V AC, max. 27 VA
Connectors	RJ45 for 10BASE-T/100BASE-TX PoE Multi-connector (cable sold separately) for AC/DC power, 4 configurable alarm inputs/outputs, mic in, line mono input, line mono output to active speaker
Edge storage	SD/SDHC/SDXC slot supporting memory card up to 64 GB (card not included); support for recording to dedicated network-attached storage (NAS)
Operating conditions	0 °C to 50 °C (32 °F to 122 °F) Humidity 10–85% RH (non-condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F)
Approvals	EN 55022 Class A, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, EN 55024, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, C-tick AS/NZS CISPR 22 Class A, KCC KN22 Class A, KN24, IEC/EN/UL 60950-1, IEC/EN 60529 IP52, IEC 60721-4-3 Class 3K3, 3M3, IEC 60068-2 Midspan: EN 60950-1, GS, UL, cUL, CE, VCCI, CB, KCC, UL-AR
Weight	Camera: 2.6 kg (5.7 lb.); with drop-ceiling mount: 3.2 kg (7.1 lb.)
Included accessories	AXIS T8123 High PoE Midspan 1-port, Mounting kit for hard and drop ceilings, Smoked dome cover, Installation Guide, Installation and Management Software CD, Windows decoder 1-user license
Video management software	AXIS Camera Companion (included), AXIS Camera Station and video management software from Axis' Application Development Partners (not included)
Warranty	Axis 3-year warranty and AXIS Extended Warranty option, see *www.axis.com/warranty*

a. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

More information is available at www.axis.com

Dimensions

1. *Hard-ceiling mount*
2. *Drop-ceiling mount*



Optional accessories

1. *Axis mounting accessories*
2. *AXIS T90A Illuminators*
3. *Multi-connector cable for AC/DC power, I/Os and audio*
4. *AXIS T8310 Video Surveillance Control Board*

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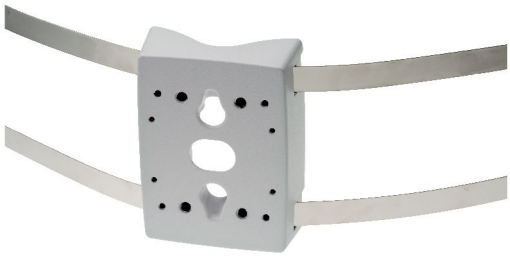
54353/EN/M1.6/112013

Axis Mounts

Mounting accessories for various locations and positions.



- > Robust and safe installation
- > Indoor and outdoor models
- > Support for Axis network cameras
- > Ease of installation

A new range of mounting accessories for installing Axis cameras and housings in different locations. They are designed to save installation time and costs.

The indoor, AXIS T91A50 Telescopic Ceiling Mount is ideal where the camera needs to be installed in a high ceiling. The telescopic functionality allows the installer to adjust the length in an easy and secure way. For indoor camera installations in low ceilings, AXIS T91A51 Ceiling Mount is the ideal option. These ceiling mounts are designed to swing and not break if hit by forklifts or tall vehicles. They can also be installed in sloped ceilings thanks to the ball joint which ensures that the camera is still hanging straight.

For installations round a pole, Axis offers AXIS T91A67 and AXIS T91A47 Pole Mounts. They are designed for both indoor and outdoor use. AXIS T91A47 is specially suitable for small or large poles, up to 400 mm (15.7 in) in diameter. Additionally, it can be used for attaching cameras to beams. When AXIS T91A47 is used for a fixed dome camera, no additional accessories such as pendant kits are required, ensuring a cost efficient solution.

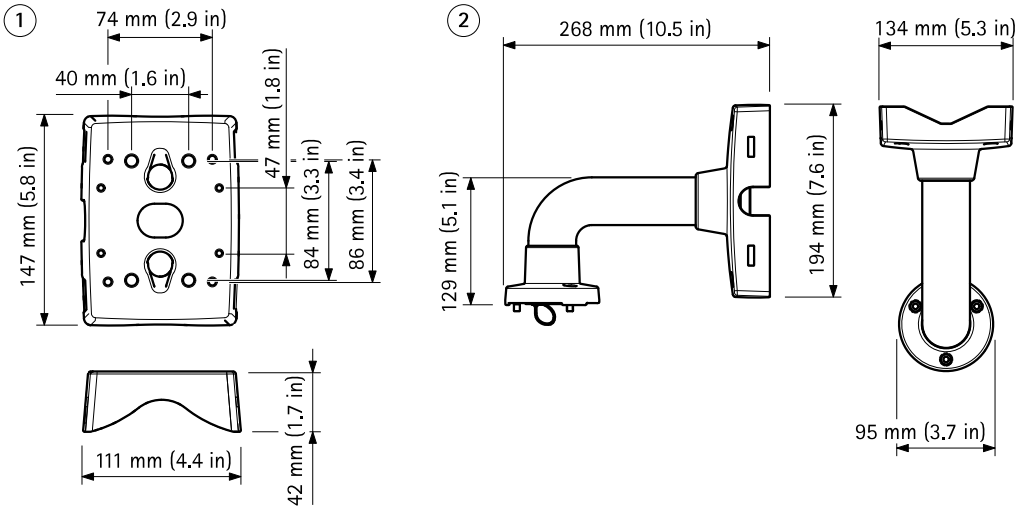
AXIS T91B Mounts and AXIS T91D61 Wall Mount are used for indoor or outdoor installations of Axis network cameras. They range from wall, parapet or ceiling installations.

Axis Mounts

Dimensions

1. AXIS T91A47

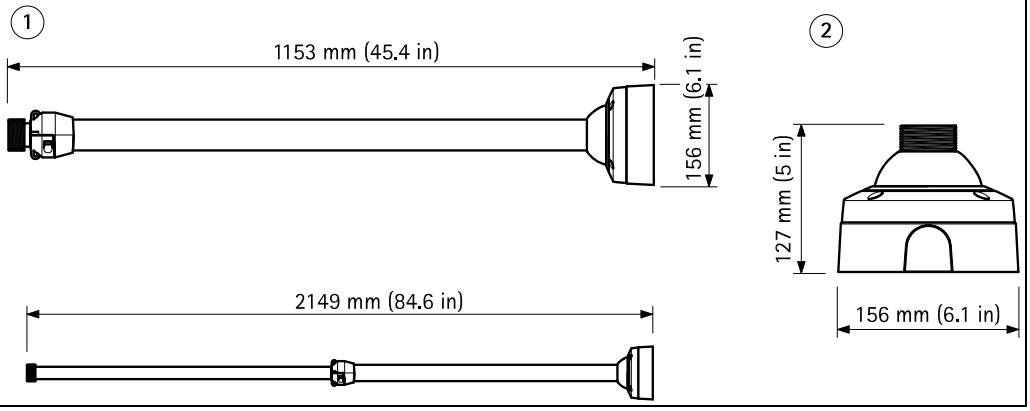
2. AXIS T91A67



Dimensions

1. AXIS T91A50
(Collapsed and extended)

2. AXIS T91A51

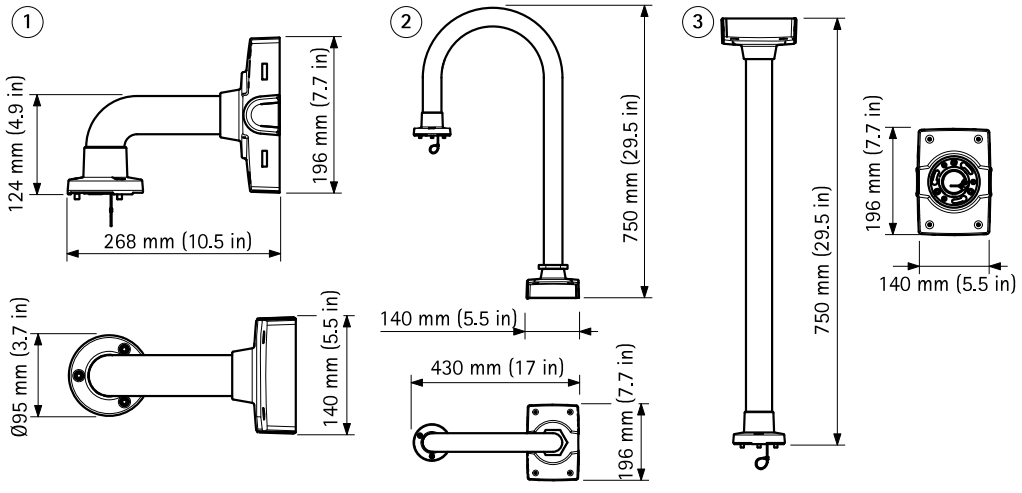


Dimensions

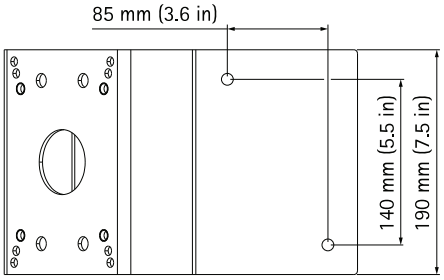
1. AXIS T91B61
(and AXIS T91D61 without the pendant kit)

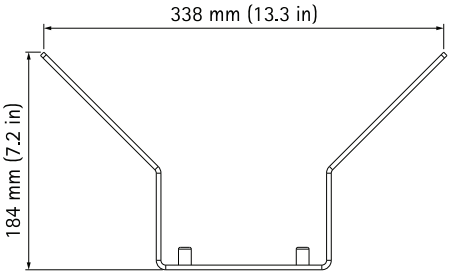
2. AXIS T91B62

3. AXIS T91B63



Dimensions - AXIS T91A64





Technical specifications – Axis Mounts

	AXIS T91A47 60–110 mm (2.4–4.3 in) AXIS T91A47 110–400 mm (4.3–15.7 in)	AXIS T91A67 Pole Mount
Mount support/ Compatible with	AXIS M1113-E/M1114-E, AXIS P13-E/Q16-E/Q17-E/Q19-E, AXIS M3006-V/M3007-P/M3007-PV/M3024-LVE/M3025-VE/M3026-VE, AXIS P33-VE, AXIS T92E Series, AXIS T93E05 and VT Wallbracket Internal Cable	AXIS P33 Series (requires AXIS P33 Pendant Kits), AXIS P55/Q60 Series
Maximum load	15 kg (33 lb)	15 kg (33 lb)
Cable routing	Back: Cable holes Side: U-shape cable hole (26 mm/1 in)	Back: Cable holes Side: U-shape cable hole (28 mm/1.1 in)
Environment	Indoor/Outdoor	Indoor/Outdoor
Approvals	IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC/EN 62262 IK10, EN 50581, NEMA 250 Type 4X* *Corrosion protected only	IEC/EN 60950-22
Weight	0.3 kg (0.7 lb) without steel straps	1.2 kg (2.7 lb)
Included accessories	Installation Guide, Cable ties, Screws **AXIS T91A47 60–110 mm (2.4–4.3 in):** Steel straps 700 mm (28 in) **AXIS T91A47 110–400 mm (4.3–15.7 in):** Steel straps 1450 mm (57 in)	Installation Guide, Steel straps 700 mm (28 in)
Required accessories	Mounting tool for pole bracket straps	Mounting tool for pole bracket straps
Warranty	Axis 3-year warranty, see www.axis.com/warranty	Axis 3-year warranty, see www.axis.com/warranty

	AXIS T91A50 Telescopic Ceiling Mount	AXIS T91A51 Ceiling Mount
Mount support/ Compatible with	AXIS P55/Q60 Series (requires AXIS T94A01D) AXIS M50 Series (requires AXIS T91A05) Axis fixed cameras (requires AXIS T91A05) AXIS P33 Series (requires AXIS P33 Pendant Kit) AXIS M32 Series, AXIS P3301/-V, AXIS P3304/-V (requires AXIS 216FD Pendant Kit) AXIS M3004-V/M3005-V (requires AXIS T94B01D) AXIS M3006-V/M3007-P/-PV/M3024-LVE/M3025-VE/M3026-VE (requires AXIS T94F01D)	AXIS P55/Q60 Series (requires AXIS T94A01D) AXIS M50 Series (requires AXIS T91A05) Axis fixed cameras (requires AXIS T91A05) AXIS P33 Series (requires AXIS P33 Pendant Kit) AXIS M32 Series, AXIS P3301/-V, AXIS P3304/-V (requires AXIS 216FD Pendant Kit) AXIS M3004-V/M3005-V (requires AXIS T94B01D) AXIS M3006-V/M3007-P/-PV/M3024-LVE/ M3025-VE/M3026–LVE (requires AXIS T94F01D)
Maximum load	10 kg (22 lb)	10 kg (22 lb)
Maximum height	Ceiling mount and extension pipes: 5000 mm (197 in)	Ceiling mount and extension pipes: 5000 mm (197 in)
Pivot angle	±45°	±45°
Cable routing	Cable conduit holes	Cable conduit holes
Environment	Indoor	Indoor
Approvals	IEC/EN/UL 60950-1, IEC/EN 62262 IK10, EN 50581	IEC/EN/UL 60950-1, IEC/EN 62262 IK10, EN 50581
Weight	4.1 kg (9 lb)	1.2 kg (2.6 lb)
Included accessories	Installation Guide, AXIS T94H01P Conduit Back Box	Installation Guide, AXIS T94H01P Conduit Back Box
Optional accessories	AXIS T91A52 Extension Pipe 30 cm (12 in), AXIS T91A52 Extension Pipe 100 cm (40 in)	AXIS T91A52 Extension Pipe 30 cm (12 in), AXIS T91A52 Extension Pipe 100 cm (40 in)
Warranty	Axis 3-year warranty, see *www.axis.com/warranty*	Axis 3-year warranty, see *www.axis.com/warranty*

54986/EN/M3.2/1032015

	AXIS T91A64 Corner Bracket
Mount support/ Compatible with	AXIS T91B61, AXIS T91D61
Maximum load	15 kg (33 lb)
Cable routing	Back: Cable holes
Environment	Indoor/Outdoor
Approvals	IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC 62262 IK10, EN 50581
Weight	1250 g (2.8 lb)
Included accessories	Installation guide
Warranty	Axis 3-year warranty, see *www.axis.com/warranty*

	AXIS T91B61 Wall Mount	AXIS T91B62 Parapet Mount	AXIS T91B63 Ceiling Mount	AXIS T91D61 Wall Mount 1.5" NPS
Mount support/ Compatible with	AXIS P55/Q60 Series	AXIS P55/Q60 Series AXIS M50 Series (requires AXIS T91A05) Axis fixed cameras (requires AXIS T91A05) AXIS P33 Series (requires AXIS P33 Pendant Kit) AXIS M32 Series, AXIS P3301/-V and AXIS P3304/-V (requires AXIS 216FD Pendant Kit) AXIS M3004-V/M3005-V (requires AXIS T94B01D) AXIS M3006-V/M3007-P/-PV/M3024-LVE/ M3025-VE/M3026-VE (requires AXIS T94F01D)	AXIS P55/Q60 Series AXIS M50 Series (requires AXIS T91A05) Axis fixed cameras (requires AXIS T91A05) AXIS P33 Series (requires AXIS P33 Pendant Kit) AXIS M32 Series, AXIS P3301/-V and AXIS P3304/-V (requires AXIS 216FD Pendant Kit) AXIS M3004-V/M3005-V (requires AXIS T94B01D) AXIS M3006-V/M3007-P/-PV/M3024-LVE/ M3025-VE/M3026-VE (requires AXIS T94F01D)	AXIS P55/Q60 Series (requires AXIS T94A01D) AXIS M50 Series (requires AXIS T91A05) Axis fixed cameras (requires AXIS T91A05) AXIS P33 Series (requires AXIS P33 Pendant Kit) AXIS M32 Series, AXIS P3301/-V and AXIS P3304/-V (requires AXIS 216FD Pendant Kit) AXIS M3004-V/M3005-V (requires AXIS T94B01D) AXIS M3006-V/M3007-P/-PV/M3024-LVE/ M3025-VE/M3026-VE (requires AXIS T94F01D)
Maximum load	15 kg (33 lb)	15 kg (33 lb)	15 kg (33 lb)	15 kg (33 lb)
Cable routing	Back: Cable hole Side: Cable conduit holes M20 (3/4 in)	Back: Cable hole Side: Cable conduit holes M20 (3/4 in)	Back: Cable hole Side: Cable conduit holes M20 (3/4 in)	Back: Cable hole Side: Cable conduit holes M20 (3/4 in)
Environment	Indoor, Outdoor	Indoor, Outdoor	Indoor, Outdoor	Indoor, Outdoor
Approvals	IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC 62262 IK10, EN 50581	IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC 62262 IK10, EN 50581	IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC 62262 IK10, EN 50581	IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, IEC 62262 IK10, EN 50581
Weight	1.5 kg (3.2 lb)	2.9 kg (6.4 lb)	2.0 kg (4.4 lb)	1.4 kg (3.0 lb)
Included accessories	Installation Guide, AXIS T91A6 Pipe Seal, AXIS T94A01D Pendant kit	Installation Guide, AXIS T91A6 Pipe Seal, AXIS T94A01D Pendant kit	Installation Guide, AXIS T91A6 Pipe Seal, AXIS T94A01D Pendant kit	Installation Guide, AXIS T91A6 Pipe Seal
Optional accessories	Axis network cable couplers, AXIS Conduit Adapter U-shape 30mm A	Axis network cable couplers, AXIS Conduit Adapter U-shape 30mm A	Axis network cable couplers, AXIS Conduit Adapter U-shape 30mm A	Axis network cable couplers, AXIS Conduit Adapter U-shape 30mm A
Warranty	Axis 3-year warranty, see www.axis.com/warranty	Axis 3-year warranty, see www.axis.com/warranty	Axis 3-year warranty, see www.axis.com/warranty	Axis 3-year warranty, see www.axis.com/warranty

More information is available at *www.axis.com*

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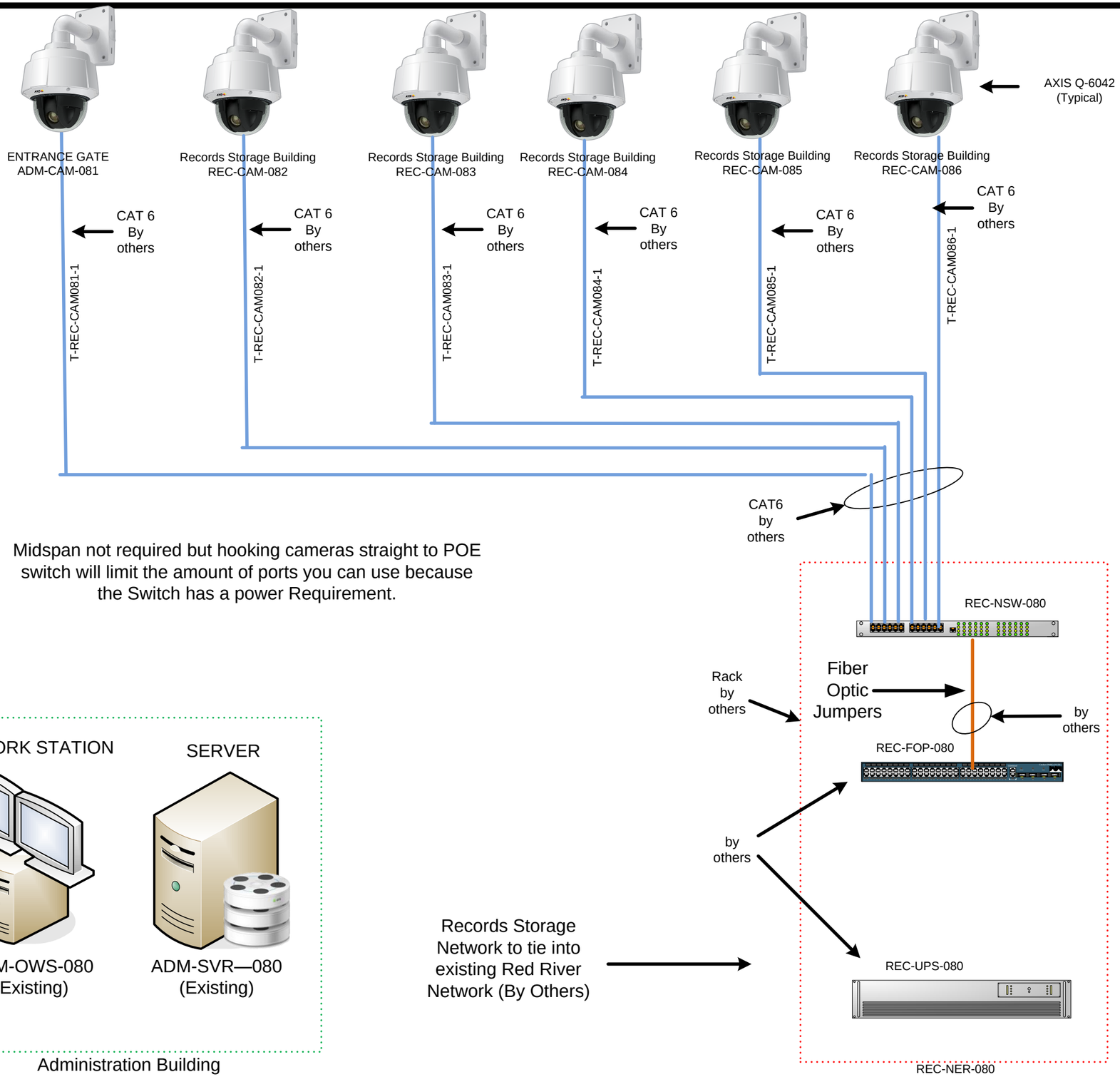
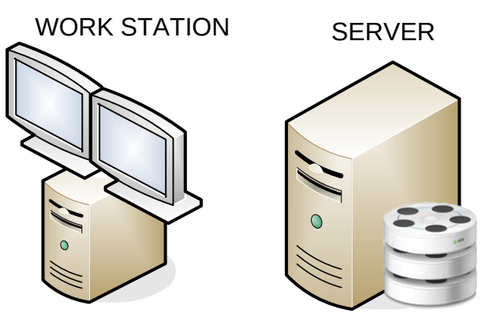


Midspan not required but hooking cameras straight to POE switch will limit the amount of ports you can use because the Switch has a power Requirement.



Administration Building

Records Storage Network to tie into existing Red River Network (By Others)

United AUTOMATION

315 Wallace Dean Road West Monroe, LA 71291
P.O. Box 607 West Monroe, LA 71294
Phone: 318-397-0208
Fax: 318-397-0140

- Building Automated Systems
- Fire Safety
- Access Controls
- Nurse Call
- CCTV
- Security
- Data & Phone Systems
- Intercom
- Energy Solutions
- Sound Systems

Architect	Engineer
Mech. Contractor	Elec. Contractor

	Record Storage Building	4/30/15	JU

BILL OF MATERIAL

ITEM	QTY	TAG	MFG	CATALOG	DESCRIPTION
1	TBD	N/A	CORNING	Ø12K8F-3113Ø-29	FIBER OPTIC CABLE, 12 FIBER, 62.5UM MULTIMODE, TIGHT-BUFFERED, FLAME-RETARDANT, INDOOR/OUTDOOR
2	TBD		CORNING	95-ØØØ-5Ø	FIBER CONNECTOR, ST COMPATIBLE MULTI-MODE UNICAM, FOR 62.5UM FIBER WITH CERAMIC FERRULE
3					
4					
5					
6	TBD	N/A	CORNING	ØØ6K8F-3113Ø-29	FIBER OPTIC CABLE, 6 FIBER, 62.5UM MULTIMODE, TIGHT-BUFFERED, FLAME-RETARDANT, INDOOR/OUTDOOR
7	TBD		CORNING	95-ØØØ-5Ø	FIBER CONNECTOR, ST COMPATIBLE MULTI-MODE UNICAM, FOR 62.5UM FIBER WITH CERAMIC FERRULE
8					
9					
1Ø					
11	1	N/A	DELL	M66ØØ	LAPTOP, MOBILE WORKSTATION, WINDOWS 7 64 BIT, QUAD CORE 2.7Ø GHZ 8MB CACHE, 8GB RAM, 2GB GRAPHICS
12					CARD, 17.3" WIDE SCREEN, 256GB SATA3 SSD, 8X DVD/RW, 3-YEAR BASIC HARDWARE SERVICE W/NBD LIMITED
13					ONSITE SERVICE AFTER REMOTE DIAGNOSIS, WIRELESS, INCLUDES MICROSOFT OFFICE 2Ø1Ø PROFESSIONAL AND
14					ADOBE ACROBAT X, INCLUDES LAPTOP CARRYING CASE, MICROSOFT SECURITY ESSENTIALS TO BE
15					DOWNLOADED AT TIME OF PURCHASE
16	1		WONDERWARE	Ø1-2624	INTOUCH FOR SYSPLATFORM 2Ø12 W/O HISTCLIENT
17	1		E&H	SFE5ØØ-16WØ/Ø	FIELD CARE, 32 DEVICES
18	1		E&H	FXA195-P1	COMMUNICATION BOX, CONVERTS HART PROTOCOLS TO USB SIGNALS
19	6	SPB-OWS-Ø6Ø	DELL	T36ØØ	WORKSTATION, PRECISION, WINDOWS 7 64 BIT, QUAD CORE 3.Ø GHZ 1ØMB CACHE, 8GB RAM, 512MB GRAPHICS
2Ø		ELC-OWS-Ø6Ø			CARD DUAL MONITORS, 5ØØGB 72ØØ RPM HD, 8X DVD/RW, 425W POWER SUPPLY, INTERNAL MEDIA READER,
21		RWPS-OWS-Ø6Ø			DUAL PORT 1ØGB NETWORK ADAPTER, 3 YEAR 24X7 PROSUPPORT AND NBD ON-SITE SERVICE
22		ADM-OWS-Ø61			AFTER REMOTE DIAGNOSIS, INCLUDES MICROSOFT OFFICE 2Ø1Ø PROFESSIONAL AND ADOBE ACROBAT X,
23		ADM-OWS-Ø62			MICROSOFT SECURITY ESSENTIALS TO BE DOWNLOADED AT TIME OF PURCHASE, MOUSE, KEYBOARD
24		ADM-OWS-Ø8Ø			
25	12		DELL	P2412H	MONITOR, 24" WIDESCREEN, LED BACKLIT, 192Ø X 1Ø8Ø RESOLUTION, 1ØØØ:1 CONTRAST RATIO
26	6		KANTEK	CS2ØØB	CPU STAND, LOCKABLE CASTERS
27	5		WONDERWARE	Ø1-2624	INTOUCH FOR SYSPLATFORM 2Ø12 W/O HISTCLIENT, INSTALLED ON ALL EXCEPT ADM-OWS-Ø8Ø
28	1		SYTECH	XL1SM	XLREPORTER, SUITE EDITION, STANDARD, SINGLE STATION, REPORTING FROM A REAL TIME AND ANALYTIC DATA,
29					HISTORICAL SERVER, WEB PUBLISHING AND 1 YEAR OF TECHNICAL SUPPORT & FREE PRODUCT UPGRADES,
3Ø					INSTALLED ON ADM-OWS-Ø61
31	6		ACRONIS	BACKUP SOFTWARE	ACRONIS BACKUP & RECOVERY(R) 11.5 FOR ADVANCED WORKSTATION, INSTALLED ON ALL WORKSTATIONS
32					
33					
34	5	SRS-OWS-8ØØ	DELL	T36ØØ	WORKSTATION, PRECISION, WINDOWS 7 64 BIT, QUAD CORE 3.Ø GHZ 1ØMB CACHE, 8GB RAM, 512MB GRAPHICS
35		ADM-OWS-Ø63			CARD DUAL MONITORS, 5ØØGB 72ØØ RPM HD, 8X DVD/RW, 425W POWER SUPPLY, INTERNAL MEDIA READER,
36		ADM-OWS-Ø64			DUAL PORT 1ØGB NETWORK ADAPTER, 3 YEAR 24X7 PROSUPPORT AND NBD ON-SITE SERVICE
37		CITY NETWORK			AFTER REMOTE DIAGNOSIS, INCLUDES MICROSOFT OFFICE 2Ø1Ø PROFESSIONAL AND ADOBE ACROBAT X,
38		CITY NETWORK			MICROSOFT SECURITY ESSENTIALS TO BE DOWNLOADED AT TIME OF PURCHASE, MOUSE, KEYBOARD
39	5		DELL	P2412H	MONITOR, 24" WIDESCREEN, LED BACKLIT, 192Ø X 1Ø8Ø RESOLUTION, 1ØØØ:1 CONTRAST RATIO
4Ø	5		KANTEK	CS2ØØB	CPU STAND, LOCKABLE CASTERS
41	2		WONDERWARE	Ø1-2624	INTOUCH FOR SYSPLATFORM 2Ø12 W/O HISTCLIENT, INSTALLED ON ADM-OWS-Ø63 & ADM-OWS-Ø64
42	5		ACRONIS	BACKUP SOFTWARE	ACRONIS BACKUP & RECOVERY(R) 11.5 FOR ADVANCED WORKSTATION, INSTALLED ON ALL WORKSTATIONS
43					
44	1		BLACK BOX	EC42U3Ø42SMDS1NK	NETWORK RACK ENCLOSURE, 42U,79" H X 3Ø" W X 42" D, 2ØØØLB. LOAD CAPACITY, M6 RAILS W/SQUARE HOLES,
45					MESH FRONT DOOR, SPLIT MESH BACK DOOR, SOLID SIDE DOORS, 1 1Ø" FAN 55Ø CFM W/8' CORD & NEMA
46					5-15 PLUG CONNECTOR & 11ØVAC, KEYED LOCK, COMES W/LEG LEVELERS AND CASTERS, UNIVERSAL
47					MOUNTING HOLES ALLOW FOR REVERSING DOOR, BLACK, INCLUDES GROUND LUG, 5Ø CAGE NUTS & SCREWS
48	1		BLACK BOX	RM4Ø8	CAGE NUTS AND SCREWS, PACKAGE OF 2Ø, M6
49	2		BLACK BOX	PS182A-R2	POWER STRIP, VERTICAL, 8-OUTLETS, 15A, 12Ø VAC, INCLUDES MOUNTING HARDWARE
5Ø	1		HOFFMAN	PGK	GROUND KIT, INCLUDES 6 16" LONG 12-GAUGE WIRES W/RING TERMINATIONS AND M6 MOUNTING HARDWARE
51	7		BLACK BOX	37803-R2	HORIZONTAL CABLE MANAGEMENT, 1U, 5 1.25" X 4" RINGS
52	1	ADM-FOP-Ø6Ø	CORNING	CCH-Ø1U	FIBER PATCH PANEL Ø1U, HOLDS 2 CCH CONNECTOR PANELS
53	1	ADM-FOP-Ø7Ø	CORNING	CCH-Ø3U	FIBER PATCH PANEL, 3U, HOLDS 6 CCH CONNECTOR PANELS, 133MM H X 483MM W X 43ØMM D
54	8		CORNING	CCH-CP12-15T	CCH CONNECTOR PANEL, ST COMPATIBLE MULTIMODE, FOR 62.5UM FIBER W/CERAMIC FERRULE
55	1	ADM-CPP-Ø6Ø	BLACK BOX	JPM612A-R7	COPPER PATCH PANEL, CAT6, 48-PORT, 2U
56	1	ADM-NSW-Ø6Ø	HIRSCHMANN	MACH1Ø4-2ØTX-FR	24 PORTS - 2Ø GIGABIT ETHERNET COPPER & 4 GIGABIT ETHERNET COMBO PORTS,
					W/REDUNDANT POWER SUPPLIES, 1RU, IP BASE FEATURE SET

ITEM	QTY	TAG	MFG	CATALOG	DESCRIPTION
57					
58	5	ADM-NSW-Ø6Ø	HIRSCHMANN	M-SFP-SX/LC	GIGABIT ETHERNET SFP, MULTIMODE FIBER w/LC CONNECTOR SX TRANSCEIVER
59					
6Ø	1	ADM-NSW-Ø8Ø	PROVIDED BY OTHERS	TBD	GIGABIT NETWORK SWITCH TX/FX
61					
62	1		QUIKTRON	FOAS2FLCST-2M	FIBER JUMPER, LC-ST, 2M
63					
64					
65					
66					
67					
68	1	ADM-NER-Ø72	BLACK BOX	EC42U3Ø42SMDS1NK	NETWORK RACK ENCLOSURE, 42U,79" H X 3Ø" W X 42" D, 2ØØØlb. LOAD CAPACITY, M6 RAILS w/SQUARE HOLES,
69					MESH FRONT DOOR, SPLIT MESH BACK DOOR, SOLID SIDE DOORS, 1 1Ø" FAN 55Ø CFM w/8' CORD & NEMA
7Ø					5-15 PLUG CONNECTOR & 11ØVAC, KEYED LOCK, COMES w/LEG LEVELERS AND CASTERS, UNIVERSAL
71					MOUNTING HOLES ALLOW FOR REVERSING DOOR, BLACK, INCLUDES GROUND LUG, 5Ø CAGE NUTS & SCREWS
72	1		BLACK BOX	RM4Ø8	CAGE NUTS AND SCREWS, PACKAGE OF 2Ø, M6
73	2		BLACK BOX	PS182A-R2	POWER STRIP, VERTICAL, 8-OUTLETS, 15A, 12Ø VAC, INCLUDES MOUNTING HARDWARE
74	1		HOFFMAN	PGK	GROUND KIT, INCLUDES 6 16" LONG 12-GAUGE WIRES w/RING TERMINATIONS AND M6 MOUNTING HARDWARE
75					
76	1		TRIPP-LITE	B82Ø-U08-19-K	CONSOLE KVM SWITCH, 1RU, w/19" LCD + 8 PS2/USB COMBO CABLES, 1280 X 1024 RESOLUTION, 120V, 1A
77	1		LaCIE	9ØØØ316	EXTERNAL HARD DRIVES, 4TB, RAID0+1, USB 3.Ø, 72ØØ RPM
78	1		BLACK BOX	RM4Ø3	FIXED VENTED SERVER SHELF, FOR EXTERNAL HD'S
79	1	ADM-SRV-Ø61	DELL	R72Øxd	I/O PRIMARY SERVER, POWEREDGE, WINDOWS SERVER 2ØØ8 R2 SP1 STANDARD 64 BIT, 6 CORE 2.9Ø GHz
8Ø					15MB CACHE, 32GB RAM, 3 5ØØGB 7.2K RPM SATA HARD DRIVES RAID 5 CONFIGURED, DUAL REDUNDANT
81					495W POWER SUPPLIES, 2 NETWORK ADAPTERS, READY RAILS w/CABLE MANAGEMENT, BEZEL, 3 YEAR 24X7
82					PROSUPPORT AND NBD ON-SITE SERVICE
83	1	ADM-SRV-Ø62	DELL	R72Øxd	I/O BACKUP SERVER, POWEREDGE, WINDOWS SERVER 2ØØ8 R2 SP1 STANDARD 64 BIT, 6 CORE 2.9Ø GHz
84					15MB CACHE, 32GB RAM, 3 5ØØGB 7.2K RPM SATA HARD DRIVES RAID 5 CONFIGURED, DUAL REDUNDANT
85					495W POWER SUPPLIES, 2 NETWORK ADAPTERS, READY RAILS w/CABLE MANAGEMENT, BEZEL, 3 YEAR 24X7
86					PROSUPPORT AND NBD ON-SITE SERVICE
87	1	ADM-SRV-Ø63	DELL	R72Øxd	DEVELOPMENT, HISTORIAN, GALAXY REPOSITORY SERVER, POWEREDGE, WINDOWS SERVER 2ØØ8 R2 SP1
88					STANDARD 64 BIT, 6 CORE 2.9Ø GHz 15MB CACHE, 32GB RAM, 3 5ØØGB 7.2K RPM SATA HARD DRIVES RAID 5
89					CONFIGURED, DUAL REDUNDANT 495W POWER SUPPLIES, 2 NETWORK ADAPTERS, READY RAILS w/CABLE
9Ø					MANAGEMENT, BEZEL, 3 YEAR 24X7 PROSUPPORT AND NBD ON-SITE SERVICE
91	1	ADM-SRV-Ø8Ø	PROVIDED BY OTHERS	TBD	SECURITY SYSTEM SERVER
92					
93					
94					
95	3		MICROSOFT	OFFICE	PROFESSIONAL, LATEST EDITION, INSTALLED ON ALL 4 SERVERS, SECURITY SERVER SOFTWARE BY OTHERS
96	1		ADOBE	ACROBAT	STANDARD, LATEST EDTION, INSTALLED ON BACKUP SERVER ONLY (ADM-SRV-Ø62)
97	4		ACRONIS	BACKUP SOFTWARE	BACKUP & RECOVERY 11.5 ADVANCED SERVER FOR WINDOWS, INSTALLED ON ALL SERVERS
98	1		WONDERWARE	SP-3250A	SYSTEM PLATFORM 2Ø12, INCLUDES HISTORIAN INSTALLED ON ADM-SRV-Ø63, 4 APPLICATION SERVER
99					PLATFORMS INSTALLED ON ADM-SRV-Ø63, 2 DEVICE INTEGRATION SERVERS ONE EACH INSTALLED ON
1ØØ					ADM-SRV-Ø61 & ADM-SRV-Ø62
1Ø1	1		WONDERWARE	97-1259T	DEVELOPMENT STUDIO 2Ø12 LARGE 5K/3K/5ØØ TSE INSTALLED ON ADM-SRV-Ø63
1Ø2	1		WONDERWARE	17-1131	WW HISTORIAN CLIENT PER SERVER CONCURRENT, 5 USERS, V1Ø.Ø INSTALLED ON ADM-SRV-Ø63
1Ø3	1		WONDERWARE	17-Ø238	WW BASIC CAL w/MS CAL, 5 PACK, v2ØØ8 INSTALLED ON ADM-SRV-Ø63
1Ø4	2		KEP	41233192-EX-15C15DUT	KEPWARE KEPSERVEREX ONE EACH INSTALLED ON ADM-SRV-Ø61 & ADM-SRV-Ø62
1Ø5					
1Ø6					
1Ø7					
1Ø8	3		WONDERWARE	STDS-Ø19	WONDERWARE CUSTOMER FIRST SUPPORT-STANDARD LEVEL-ONE, INCLUDES TECHNICAL SUPPORT AND VERSION
1Ø9					UPGRADES FOR THE ABOVE LICENSES ONLY (NOTE: THIS SUPPORT COVERS THE LICENSING AT BOTH PLANTS)
11Ø	1	ADM-CPP-Ø7Ø	BLACK BOX	JPM612A-R7	COPPER PATCH PANEL, CAT6, 48-PORT, 2U
111	1	ADM-CPP-Ø7Ø	BLACK BOX	JPM61ØA-R7	COPPER PATCH PANEL, CAT6, 24-PORT, 1U
112	1	ADM-NSW-Ø7Ø	OWNER PROVIDED	TBD	NETWORK SWITCH

REV	DATE	DESCRIPTION	BY	APPV
F	Ø6/22/15	PER SUBMITTAL COMMENTS	LDG	MLC
E	Ø5/13/15	CHANGE ORDER	YNB	MLC
C	Ø1/24/14	PER ENGINEER'S COMMENTS	YNB	MLC
B	Ø7/Ø1/13	PER ENGINEER'S COMMENTS	MLB	JWO
A	12/26/12	DESIGN	MLB	JWO

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CITY OF BOSSIER CITY, LOUISIANA
WASTEWATER SYSTEM IMPROVEMENTS
RED RIVER WWTP EXPANSION AND REHABILITATION PROJECT
BILL OF MATERIAL

DRAWN BY: MLB | DATE: 12/26/12
CHECKED BY: JWO | SCALE: NTS

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 1Ø1.DWG
DWG NO: NØ575_RR-NETWORK-1Ø1 1/5

08:14
06-23-15

F:\PROJECT FILES\2012\N057500\DRAWINGS.REO\RR-NETWORK\101.DWG

BILL OF MATERIAL

ITEM	QTY	TAG	MFG	CATALOG	DESCRIPTION
113	2	ELC-UPS-050,	EATON	0660C090AAAAAAAI	UPS, 9170+ SERIES, 9-SLOT ENCLOSURE, HARDWIRE INPUT/OUTPUT
114	4	SPB-UPS-050	EATON	ASY-0673	SPLIT PHASE POWER MODULE, 3kVA/2.5kW FOR POWERWARE 9170+ UPS
115	8		EATON	ASY-0529	POWERWARE BATTERY MODULE
116	2		EATON	116750222-001	CONNECTUPS-BD SNMP NETWORK CARD
117	2		EATON	BPE20MBB1A	MAINTENANCE BYPASS SWITCH, MAKE-BEFORE-BREAK, EXTERNAL, 125AMP
118					
119					
120					
121	1	RWPS-UPS-050	EATON	0660C090AAAAAAAI	UPS, 9170+ SERIES, 9-SLOT ENCLOSURE, HARDWIRE INPUT/OUTPUT
122	1		EATON	ASY-0673	SPLIT PHASE POWER MODULE, 3kVA/2.5kW FOR POWERWARE 9170+ UPS
123	2		EATON	ASY-0529	POWERWARE BATTERY MODULE
124	1		EATON	116750222-001	CONNECTUPS-BD SNMP NETWORK CARD
125	1		EATON	BPE20MBB1A	MAINTENANCE BYPASS SWITCH, MAKE-BEFORE-BREAK, EXTERNAL, 125AMP
126					
127					
128					
129	1	ADM-UPS-050	EATON	0660C120AAAAAAAI	UPS, 9170+ SERIES, 12-SLOT ENCLOSURE, HARDWIRE INPUT/OUTPUT
130	3		EATON	ASY-0673	SPLIT PHASE POWER MODULE, 3kVA/2.5kW FOR POWERWARE 9170+ UPS
131	6		EATON	ASY-0529	POWERWARE BATTERY MODULE
132	1		EATON	116750222-001	CONNECTUPS-BD SNMP NETWORK CARD
133	1		EATON	BPE20MBB1A	MAINTENANCE BYPASS SWITCH, MAKE-BEFORE-BREAK, EXTERNAL, 125AMP
134					
135					
136	1		EATON	NETWORK - MS	ETHERNET NETWORK CARD
137	3	CITY NETWORK	BROTHER	MFC-8710DW	LASERJET PRINTER, MULTI-FUNCTION, 40PPM PRINT SPEED, 1200 X 1200 dpi PRINT RESOLUTION, 64MB MEMORY,
138		CITY NETWORK			WIRELESS 802.11b/g/n, ETHERNET, USB 2.0, 8.5" X 14" DOCUMENT GLASS, 33.6K bps FAX MODEM,
139		ADM-PRINT-060			COLOR SCANNER, WINDOWS 7 COMPATIBLE
140	6		BROTHER	TN-720	STANDARD YIELD TONER (APPROX. 3,000 PAGES)
141	6		ANY	PAPER	1000 SHEET REAM OF 8-1/2" X 11", 24lb, LASER PRINTING PAPER
142	1	REC-NER-080	HOFFMAN	EWMW482425	19" RACK WALL MOUNT SERVER RACK
143	1	REC-FOP-080	CORNING	CCH-01U	19" RACK MOUNT FIBER CONNECTOR PANEL, HOLDS 2 CCH CONNECTOR PANELS, 1U
144	1		CORNING	CCH-CP12-15TCCH	CONNECTOR PANEL, MULTIMODE, ST, 62.5uM, CERAMIC FERRULE, 12 FIBER CONNECTIONS
145	1	REC-UPS-080	EATON	PW9130L700R-XL2U	700VA RACK MOUNT UPS, 2U
146	3		BLACK BOX	37803-R2	HORIZONTAL CABLE MANAGEMENT, 1U

REV	DATE	DESCRIPTION	BY	APPV
F	06/22/15	PER SUBMITTAL COMMENTS	LDG	MLC
E	05/13/15	CHANGE ORDER	YNB	MLC
C	01/24/14	PER ENGINEER'S COMMENTS	YNB	MLC
B	07/01/13	PER ENGINEER'S COMMENTS	MLB	JWO
A	12/26/12	DESIGN	MLB	JWO

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CITY OF BOSSIER CITY, LOUISIANA
WASTEWATER SYSTEM IMPROVEMENTS
RED RIVER WWTP EXPANSION AND REHABILITATION PROJECT
BILL OF MATERIAL

DRAWN BY:	MLB	DATE:	12/26/12
CHECKED BY:	JWO	SCALE:	NTS

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	102.DWG
DWG NO:	N0575_RR-NETWORK-102

08:14 06-23-15

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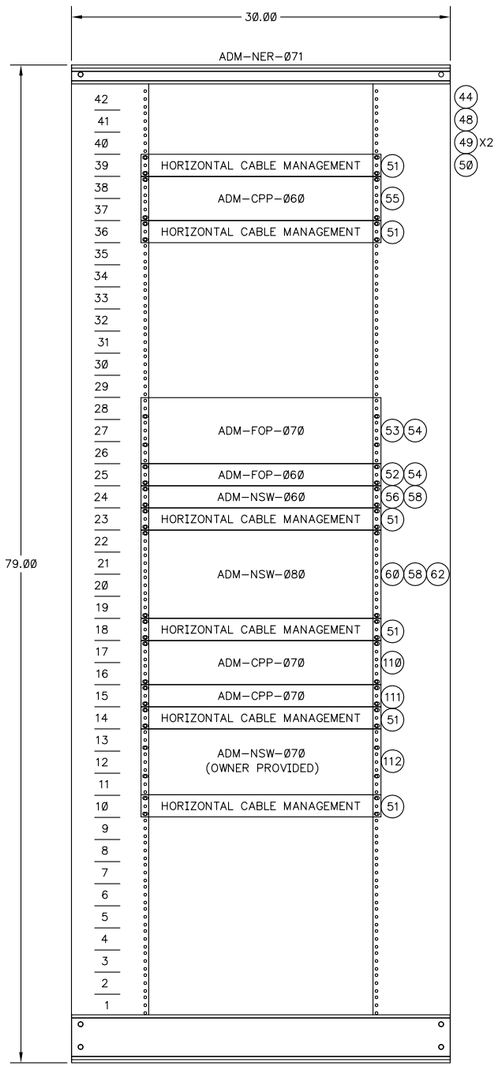

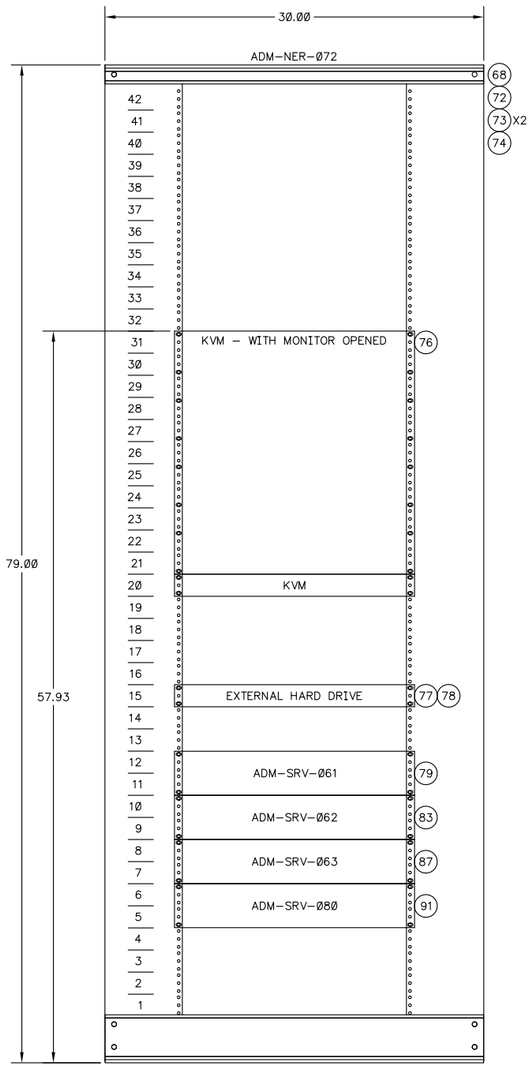

NOTE:

1. PROVIDED BY OTHERS.

REV	DATE	DESCRIPTION	BY	APPV
F	06/22/15	PER SUBMITTAL COMMENTS	LDG	MLC
E	05/13/15	CHANGE ORDER	YNB	MLC
C	01/24/14	PER ENGINEER'S COMMENTS	YNB	MLC
B	07/01/13	PER ENGINEER'S COMMENTS	MLB	JWO
A	12/26/12	DESIGN	MLB	JWO

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CITY OF BOSSIER CITY, LOUISIANA
WASTEWATER SYSTEM IMPROVEMENTS
RED RIVER WWTP EXPANSION AND REHABILITATION PROJECT
NETWORK RACK LAYOUT

DRAWN BY:	MLB	DATE:	12/26/12
CHECKED BY:	JWO	SCALE:	NTS

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.	DWG NO:	N0575_RR-NETWORK-103
FILE NAME:	103.DWG		3/5

06-23-15 08:14

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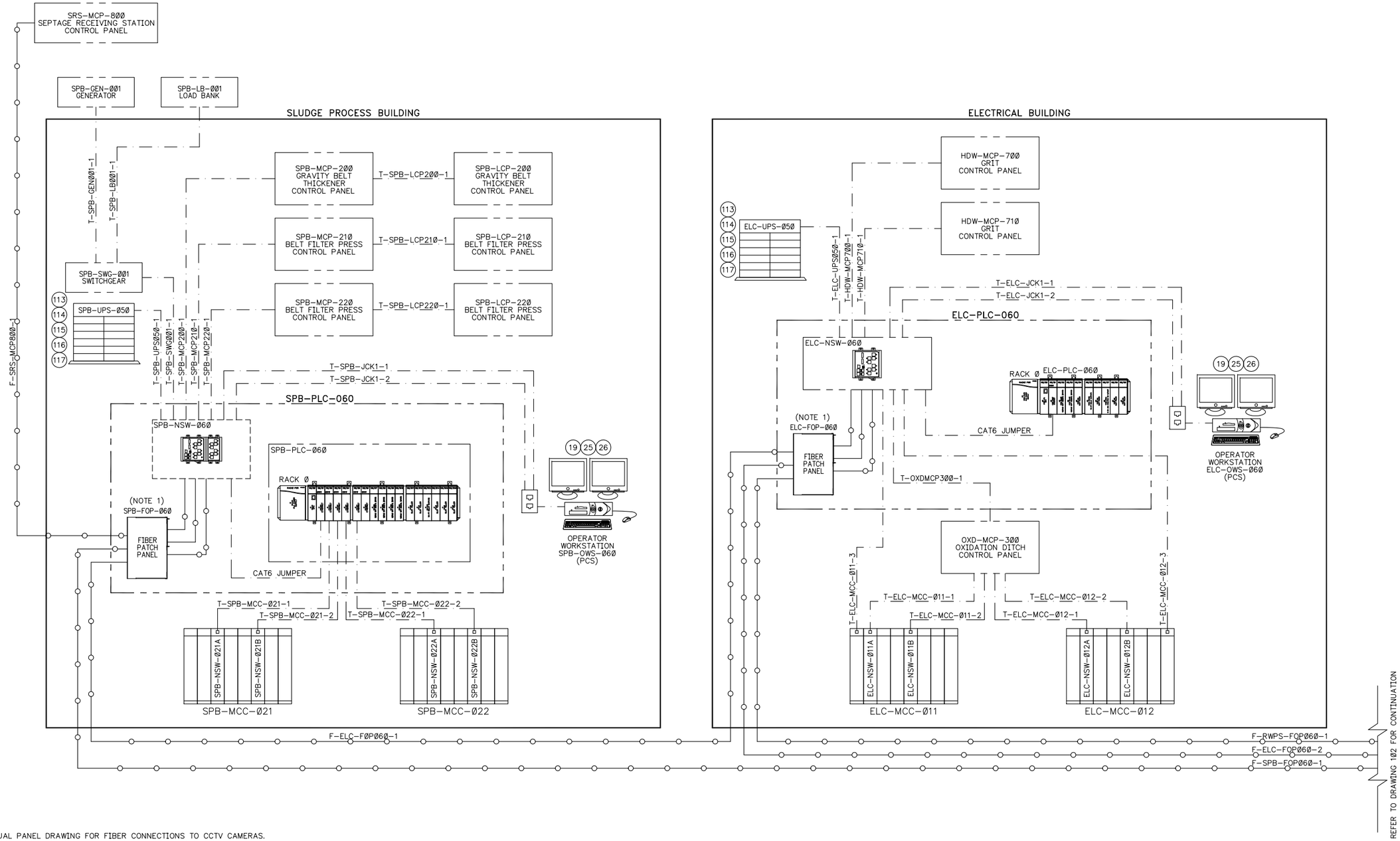

NOTE:

1. SEE INDIVIDUAL PANEL DRAWING FOR FIBER CONNECTIONS TO CCTV CAMERAS. ALSO REFERENCE CONTRACT DRAWING ERR-65 FOR CAMERA NETWORK.

CABLE LEGEND

ETHERNET

FIBER OPTIC

MISC COMM. CABLE

REV	DATE	DESCRIPTION	BY	APPV
F	06/22/15	PER SUBMITTAL COMMENTS	LDG	MLC
E	05/13/15	CHANGE ORDER	YNB	MLC
C	01/24/14	PER ENGINEER'S COMMENTS	YNB	MLC
B	07/01/13	PER ENGINEER'S COMMENTS	MLB	JWO
A	12/26/12	DESIGN	MLB	JWO

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CITY OF BOSSIER CITY, LOUISIANA
WASTEWATER SYSTEM IMPROVEMENTS
RED RIVER WWTP EXPANSION AND REHABILITATION PROJECT
NETWORK DIAGRAM I

DRAWN BY: MLB | DATE: 12/26/12
CHECKED BY: JWO | SCALE: NTS

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 104.DWG
DWG NO: N0575_RR-NETWORK-104

06-23-15 08:14
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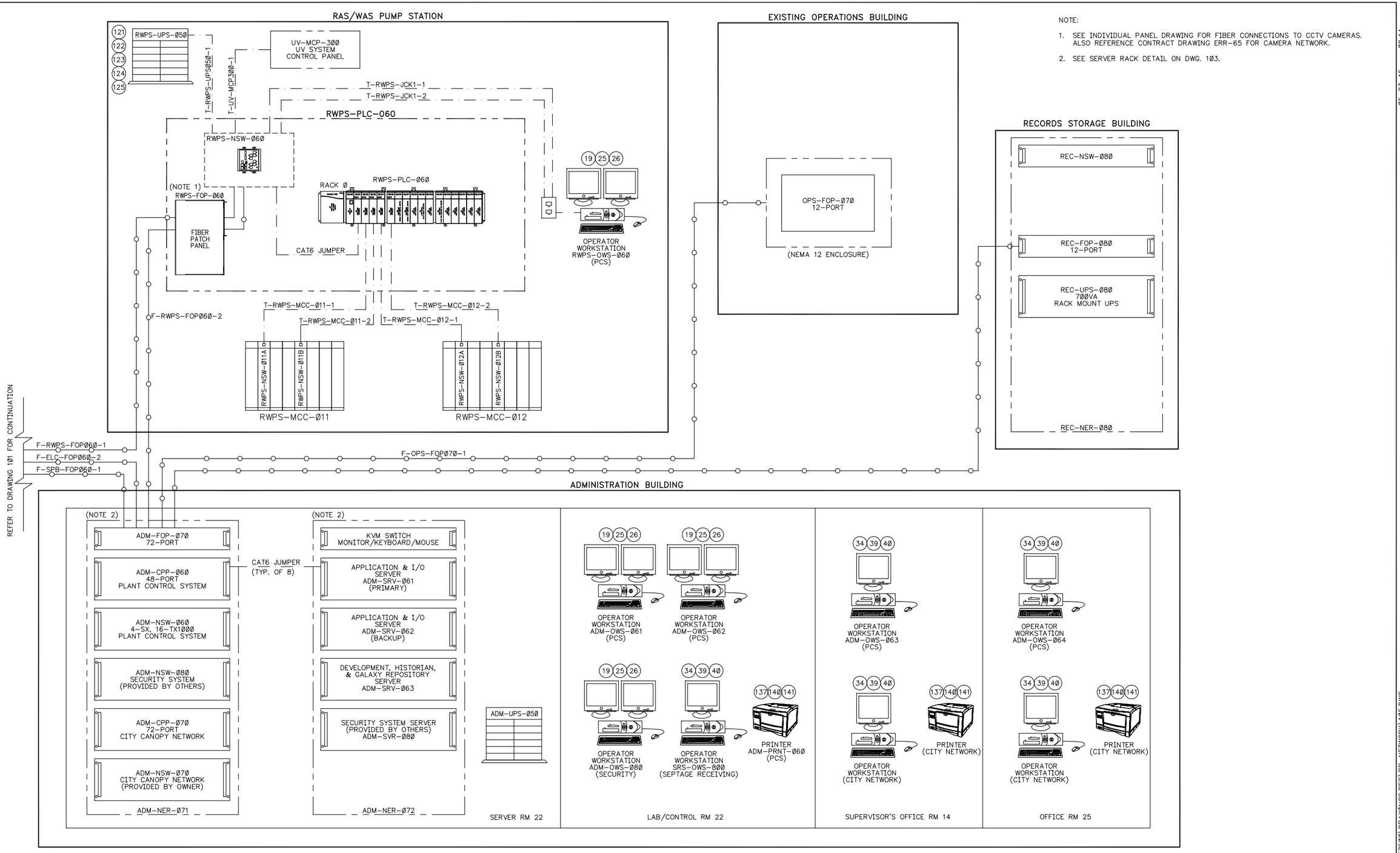
NOTE:

1. SEE INDIVIDUAL PANEL DRAWING FOR FIBER CONNECTIONS TO CCTV CAMERAS. ALSO REFERENCE CONTRACT DRAWING ERR-65 FOR CAMERA NETWORK.
2. SEE SERVER RACK DETAIL ON DWG. 103.



CABLE LEGEND

ETHERNET

FIBER OPTIC

MISC COMM. CABLE

REV	DATE	DESCRIPTION	BY	APPV
F	06/22/15	PER SUBMITTAL COMMENTS	LDG	MLC
E	05/13/15	CHANGE ORDER	YNB	MLC
C	01/24/14	PER ENGINEER'S COMMENTS	YNB	MLC
B	07/01/13	PER ENGINEER'S COMMENTS	MLB	JWO
A	12/26/12	DESIGN	MLB	JWO

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CITY OF BOSSIER CITY, LOUISIANA
WASTEWATER SYSTEM IMPROVEMENTS
RED RIVER WWTP EXPANSION AND REHABILITATION PROJECT
NETWORK DIAGRAM II

DRAWN BY:	MLB	DATE:	12/26/12
CHECKED BY:	JWO	SCALE:	NTS

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	105.DWG
DWG NO:	N0575_RR-NETWORK-105

5/5

06-23-15 08:14

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL

DRAWING NO.	DRAWING DESCRIPTION
1Ø1	TITLE SHEET
2Ø1	BILL OF MATERIAL
2Ø2	ENCLOSURE LAYOUT
2Ø3	SUBPANEL LAYOUT
2Ø4	TERMINAL BLOCK DETAIL
2Ø5	TERMINAL BLOCK DETAIL
3Ø1	COMMUNICATION DIAGRAM
4Ø1	12ØVAC POWER DISTRIBUTION
4Ø2	POWER DISTRIBUTION
5Ø1	DIGITAL INPUT MODULE WIRING DIAGRAM
5Ø2	DIGITAL INPUT MODULE WIRING DIAGRAM
5Ø3	DIGITAL INPUT MODULE WIRING DIAGRAM
5Ø4	DIGITAL INPUT MODULE WIRING DIAGRAM
5Ø7	DIGITAL OUTPUT MODULE WIRING DIAGRAM
511	ANALOG INPUT MODULE WIRING DIAGRAM
512	ANALOG INPUT MODULE WIRING DIAGRAM
513	ANALOG INPUT MODULE WIRING DIAGRAM
514	ANALOG INPUT MODULE WIRING DIAGRAM
515	ANALOG INPUT MODULE WIRING DIAGRAM
516	ANALOG INPUT MODULE WIRING DIAGRAM
519	ANALOG OUTPUT MODULE WIRING DIAGRAM
52Ø	ANALOG OUTPUT MODULE WIRING DIAGRAM
9Ø1	GENERAL INFORMATION LEGEND
9Ø2	LABEL LEGEND

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
Ø	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
TITLE SHEET

DRAWN BY:	LDG
CHECKED BY:	ACS
DATE:	12/4/12
SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 1Ø1.DWG
DWG NO: NØ575_RR-SPB-PLC-Ø6Ø-1Ø1
1/24

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BILL OF MATERIAL

ITEM	QTY	MFG	CATALOG	DESCRIPTION
1	1	HOFFMAN	A727224FSD	ENCLOSURE, FREE-STANDING, NEMA 12, 72" X 72" X 24"
2	1	HOFFMAN	A72P72F1	SUBPANEL, 60" X 68"
3	6	HOFFMAN	AHCI10E	CORROSION INHIBITOR EMITTER, 10 CUBIC FT, 2.5" DIA X 2" H
4	2	HOFFMAN	ATEMNO	TEMPERATURE SWITCH, NO
5	1	HOFFMAN	AASHLF1818	SHELF, 18" X 18"
6	2	HOFFMAN	LF120V18	FLUORESCENT ENCLOSURE LIGHT, 18", 120VAC, 0.13A
7	2	HOFFMAN	F8T5	FLUORESCENT BULB, 18"
8	1	HOFFMAN	ALFSWD	DOOR SWITCH
9				
10				
11				
12	1	HOFFMAN	TEP6UL12	EXHAUST GRILL, 6 IN, TYPE 12
13	1	HOFFMAN	TFP61UL12	COOLING FAN PKG, 6 IN, TYPE 12
14	1	AB	1756-A10	CONTROLLOGIX CHASSIS, 10 SLOTS
15	1	AB	1756-A17	CONTROLLOGIX CHASSIS, 17 SLOTS
16	2	AB	1756-PA72	CONTROLLOGIX POWER SUPPLY, 120/240VAC
17	1	AB	1756-L72	CONTROLLOGIX CPU, 4MB, USER MEMORY
18	5	AB	1756-ENBT	ETHERNET/IP MODULE, 10/100 Mbps, 128 LOGIX CONNECTIONS, 64 TCP/IP CONNECTIONS
19	4	AB	1756-IA16I	CONTROLLOGIX DIGITAL AC INPUT MODULE, 16 PT ISOLATED, 120VAC
20	1	AB	1756-OW16I	CONTROLLOGIX DIGITAL CONTACT OUTPUT MODULE, 16 PT ISOLATED, 10-265VAC/5-150VDC
21	3	AB	1756-IF8H	CONTROLLOGIX ANALOG INPUT MODULE, 8 PT, WITH HART 4-20mA
22	8	AB	1756-TBCH	TERMINATION BLOCK, 36 PIN
23	1	AB	1756-OF6CI	CONTROLLOGIX ANALOG OUTPUT MODULE, 6 ISOLATED OUTPUTS
24	1	AB	1756-TBNH	TERMINATION BLOCK, 20 PIN
25	10	AB	1756-N2	CONTROLLOGIX SLOT FILLER
26	2	AB	1756-EN2TR	CONTROLLOGIX ETHERNET/IP COMMUNICATION MODULE, 2 PORT
27				
28				
29				
30	1	PULS	CS5.241	POWER SUPPLY, 120W, 120/208/240VAC 1PH, 24VDC, 5A
31				
32	16	IDEC	RJ1S-CL-A120	RELAY, SPDT W/ IND LIGHT, 120VAC COIL, 12A CONTACTS
33	16	IDEC	SJ1S-07L	CONTROL RELAY BASE, BLADE TYPE, 300V 12A CONTACTS, DIN RAIL MOUNT
34	2	SQUARE D	QOU120	CIRCUIT BREAKER, 1 POLE, 20A
35	11	AB	1489-A1C050	CIRCUIT BREAKER, 1 POLE, 5A, 240VAC
36	1	AB	1489-A1C030	CIRCUIT BREAKER, 1 POLE, 3A, 240VAC
37	4	AB	1489-A1C020	CIRCUIT BREAKER, 1 POLE, 2A, 240VAC
38	11	AB	1489-A1C010	CIRCUIT BREAKER, 1 POLE, 1A, 240VAC
39	8	AB	1489-A1C005	CIRCUIT BREAKER, 1 POLE, 1/2A, 240VAC
40	30	PHOENIX CONTACT	5650102	CIRCUIT BREAKER, 1 POLE, 0.2AMP
41	6	SQUARE D	QOU110	CIRCUIT BREAKER, 1 POLE, 10A
42	61	WEIDMULLER	1020100000	TERMINAL BLOCK, FEED THROUGH, WDU 4, BEIGE, 600V, 22-10 AWG
43	41	WEIDMULLER	1010100000	TERMINAL BLOCK, GROUND, WPE 4, GREEN/YELLOW, 22-10 AWG
44	80	WEIDMULLER	1021500000	TERMINAL BLOCK, DUAL LEVEL, WDK 2.5, BEIGE, 300V, 30-12 AWG
46	4	WEIDMULLER	1059100000	TERMINAL BLOCK, END PLATE, WAP WDK 2.5, BEIGE
47	10	WEIDMULLER	1631930000	TERMINAL BLOCK, TAG CARRIER, SCHT 5 S, BEIGE
48	21	WEIDMULLER	0383560000	TERMINAL BLOCK, END BRACKET, EW 35, BEIGE
49				
50	1	WEIDMULLER	1050000000	TERMINAL BLOCK, END PLATE, WAP 2.5-10, BEIGE
51				
52	A/R	PANDUIT	F2X4LG6	WIRE DUCT, TYPE F, 2.25" x 4.10", RIGID GRAY VINYL
53	A/R	PANDUIT	C2LG6	WIRE DUCT, 2" RIGID GRAY VINYL, NON-SLIP COVER
54	A/R	PANDUIT	F3X4LG6	WIRE DUCT, TYPE F, 3.25" X 4.10", RIGID GRAY VINYL
55	A/R	PANDUIT	C3LG6	WIRE DUCT, 3" RIGID GRAY VINYL, NON-SLIP COVER

ITEM	QTY	MFG	CATALOG	DESCRIPTION
56	2	PANDUIT	LAM2A-2/0	GROUND LUG
57	2	SQUARE D	PK9GTA	GROUND BAR, 9PT
58	4	SQUARE D	PK5GTA	GROUND BAR, 5PT
59	1	CORNING	WIC-04P	FIBER INTERCONNECT CENTER, WALL MOUNT, UP TO 4 CCH CONNECTOR PANELS
60	3	CORNING	CCH-CP12-25T	FIBER CONNECTOR PANEL, 12 ST MULTIMODE ADAPTERS, MM, 62.5uM, CERAMIC INSERT AND METAL HOUSING
61	1	HUBBELL	DRUBGFI15	GROUND FAULT RECEPTACLE, DIN RAIL BOX w/ GFR5252GYA, 15A, 125V
62	3	CORNING	0550-02K5141-0006-F	FIBER JUMPER, 6 FEET, ST/LC, MULTIMODE
63	3	BELKIN	A3L980-04-BLU-S	CABLE, PATCH, CAT6, 14 FEET, RJ45(M) TO RJ45(M) (TD#90544D)
64				
65				
66				
67	1	PHOENIX CONTACT	2839334	SURGE SUPPRESSOR, PT 2-PE/S-120VAC-ST, LINE, 120VAC, 20A
68	1	PHOENIX CONTACT	2839282	SURGE SUPPRESSOR BASE, PT BE/FM
69	13	EDCO	DRS-036	SURGE SUPPRESSOR, 30V, 3-TERMINAL DEVICE
70	20	EDCO	DRS-175-2	SURGE SUPPRESSOR, 170V, 3-TERMINAL DEVICE
71	1	REVERE	CUSTOM	NAMEPLATE, "REVERE"
72	1	HIRSCHMANN	MS4128-L2P EEC	MODULAR ETHERNET SWITCH, 24VDC, 4 X 1000 BASE-SX AND 24 100 FAST-ETHERNET PORTS, -30 TO 60°C
73	1	HIRSCHMANN	MM4-4TX/SFP	GIGABIT RJ45/SFP COMBO MODULE, 4 X COMBO PORTS FOR USE WITH MS4128 ONLY -40 TO 70°C
74	3	HIRSCHMANN	MM2-4TX1-EEC	MEDIA MODULE, 4X 10/100 Mbit/s RJ45, EXTENDED TEMPERATURE RANGE
75	2	HIRSCHMANN	M-SFP-SX/LC	SFP MODULE, 1 X 1000BASE-SX, LC CONNECTOR
76	1	HIRSCHMANN	MM20-Z6Z6Z6Z6SAHH	4X100 Mbit/s SFP SOCKETS
77	1	HIRSCHMANN	M-FAST SFP-MM/LC	SFP MODULE, 1 X 100BASE-FX, LC CONNECTOR
78	3	IDEC	RH1B-ULDC24V	RELAY, SPDT W/ IND LIGHT, 24VDC COIL, 10A CONTACTS
79	3	IDEC	SH1B-05	RELAY SOCKET, SPDT, DIN RAIL MOUNT

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
BILL OF MATERIAL

DRAWN BY: LDG | DATE: 12/4/12
CHECKED BY: ACS | SCALE: 1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 201.DWG
DWG NO: N0575_RR-SPB-PLC-060-201

09:02
06-23-15
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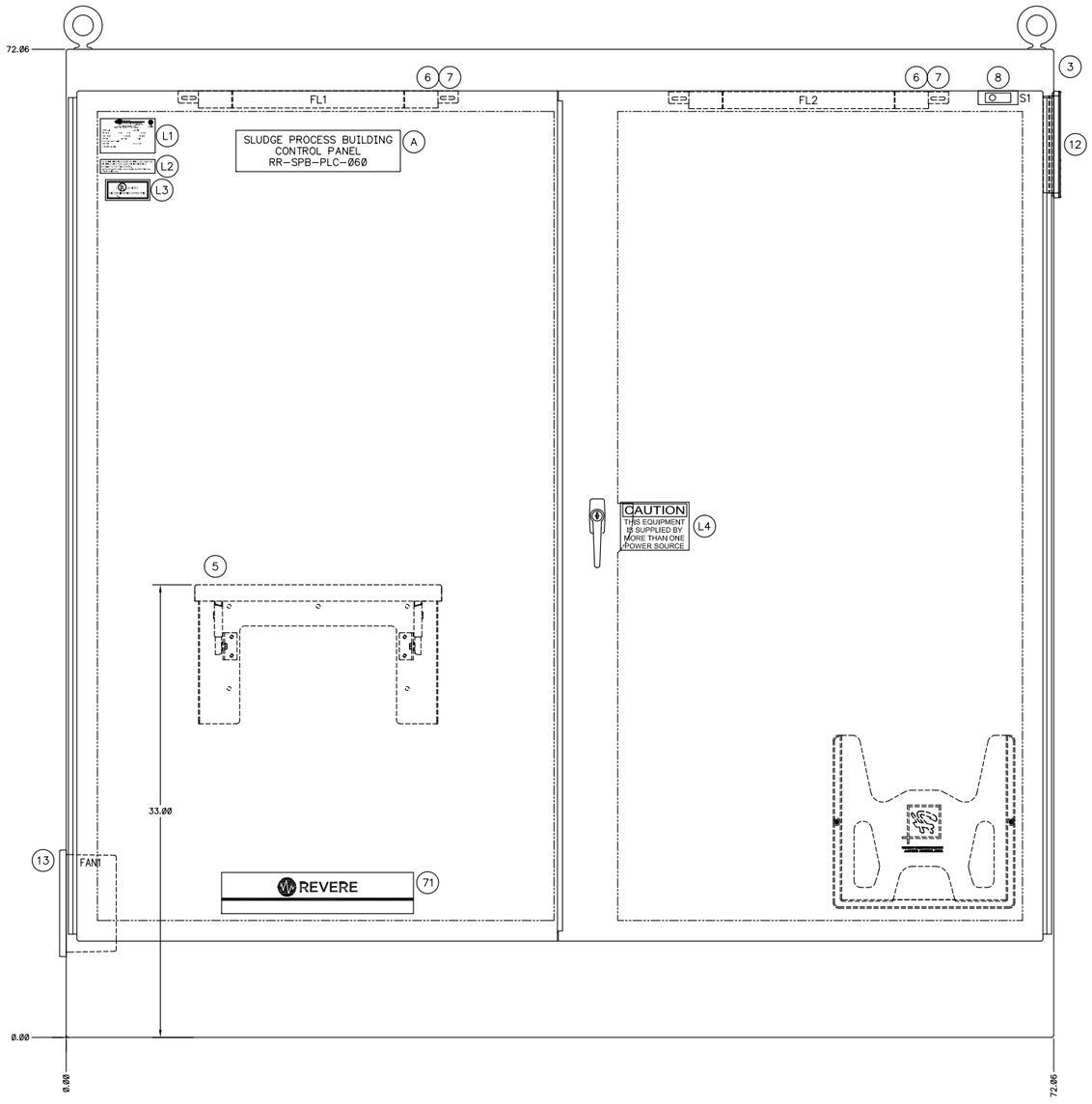
ENGRAVING SCHEDULE

ITEM	QTY	LINE1	LINE2	LINE3	TYPE OR MFG	SIZE OR CATALOG
A	1	SLUDGE PROCESS BUILDING	CONTROL PANEL	RR-SPB-PLC-060	BLACK W/.5" WHITE LETTERING	3.00" X 12.00"



FRONT VIEW
(24" DEEP)

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

NOTICE:
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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ENCLOSURE LAYOUT

DRAWN BY: LDG | DATE: 12/4/12
CHECKED BY: ACS | SCALE: 3/32" = 1"

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 202.DWG
DWG NO: N0575_RR-SPB-PLC-060-202
3/24

09-02
06-23-15

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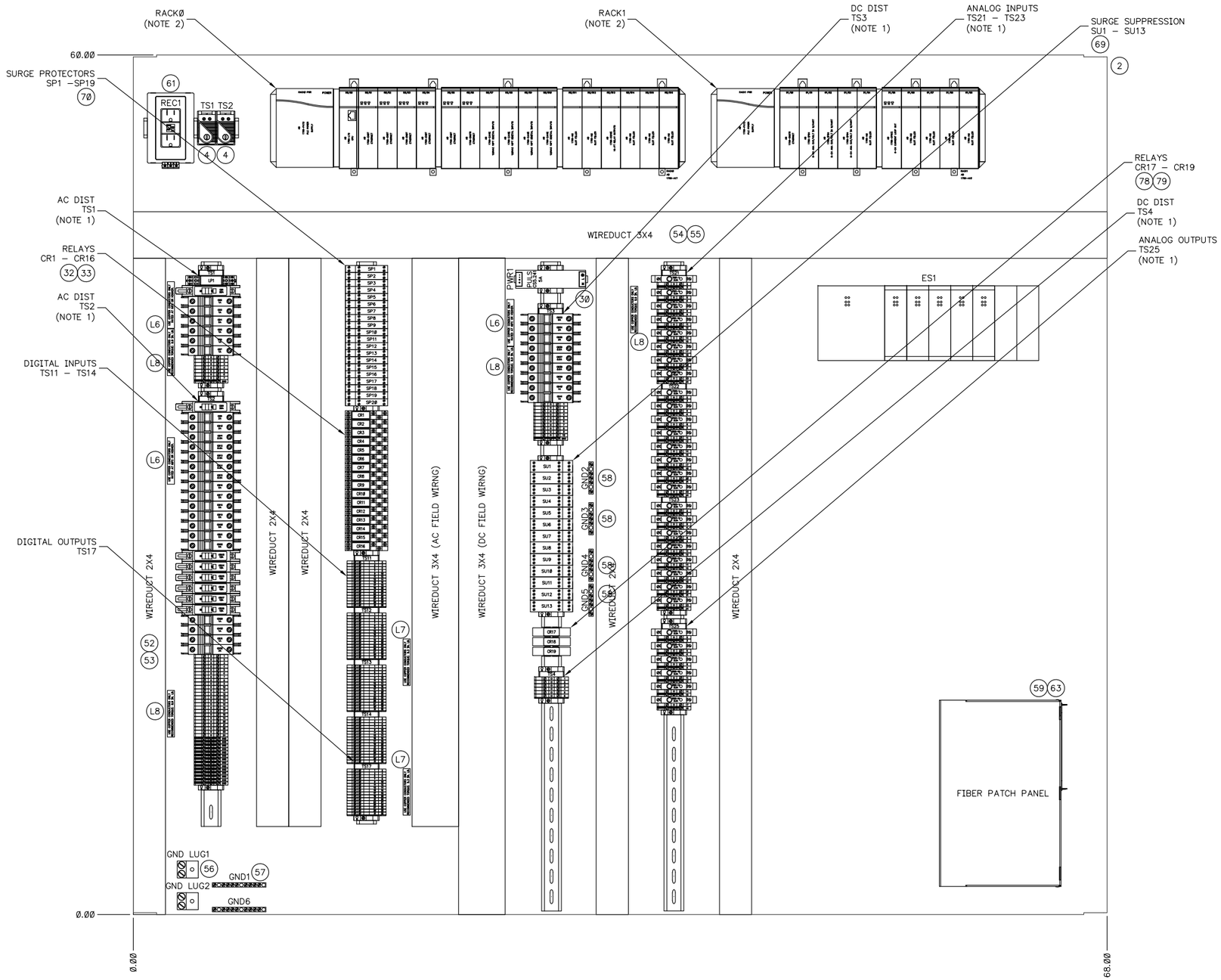

NOTES:

1. FOR TERMINAL BLOCK DETAIL SEE DWG 2Ø4
2. FOR PLC DETAIL SEE DWG 3Ø1.

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	Ø1/27/15	FIELD REVISION	JEC	MLC
Ø	Ø5/Ø6/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
SUBPANEL LAYOUT

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1/8" = 1"

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	203.DWG
DWG NO:	NØ575_RR-SPB-PLC-060-203

4/24

09:02
06-23-15

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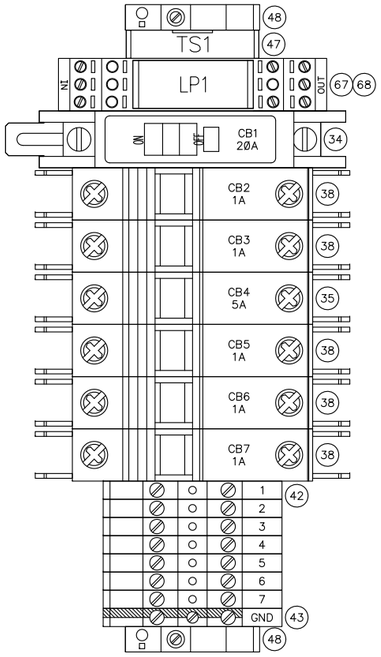
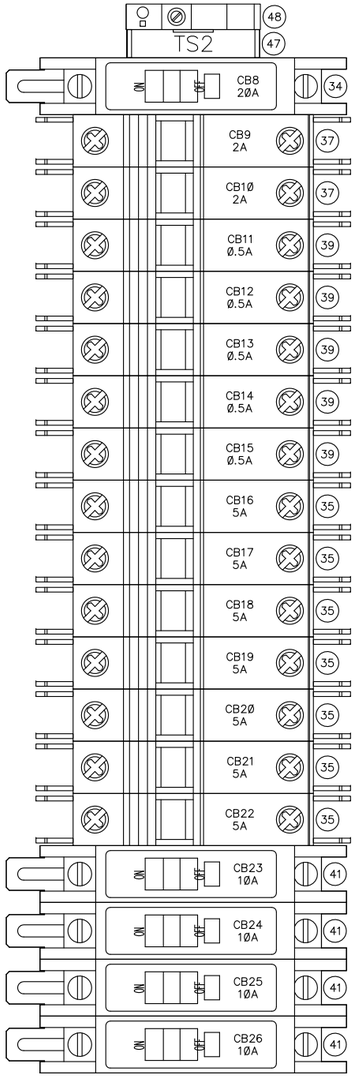


AC DIST
TS1



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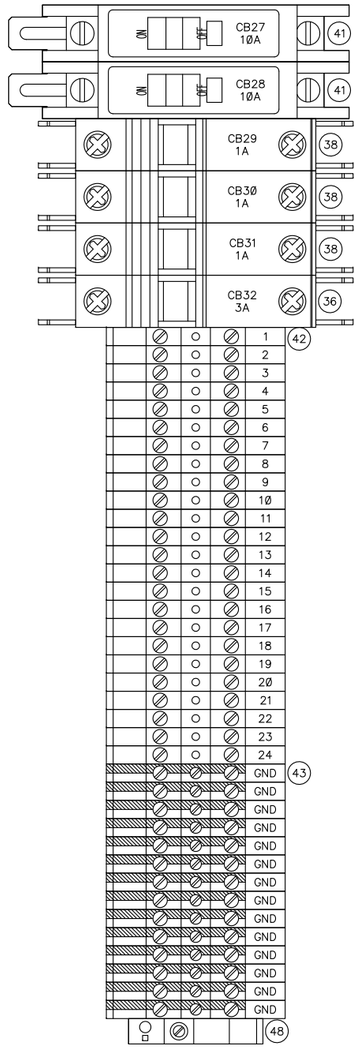

AC DIST
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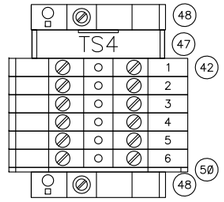
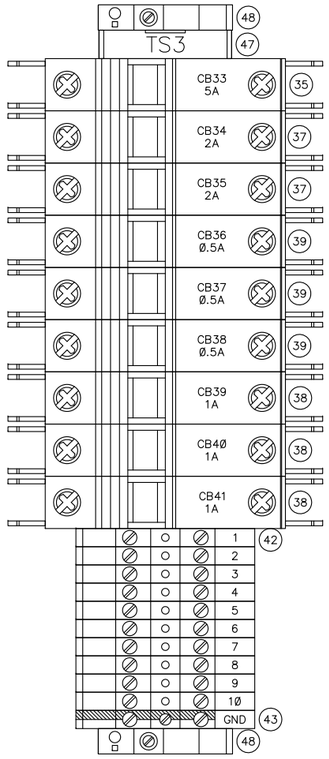


DC DIST
TS4



DC DIST
TS3

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
TERMINAL BLOCK DETAIL

DRAWN BY: LDG | DATE: 12/4/12
CHECKED BY: ACS | SCALE: 1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 204.DWG
DWG NO: N0575_RR-SPB-PLC-060-204

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06-23-15
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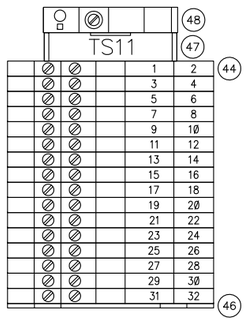
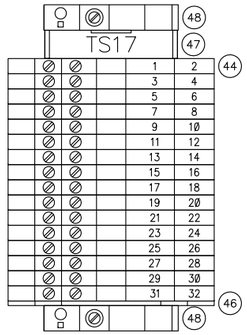


DIGITAL INPUTS
TS11–TS14



DIGITAL OUTPUTS
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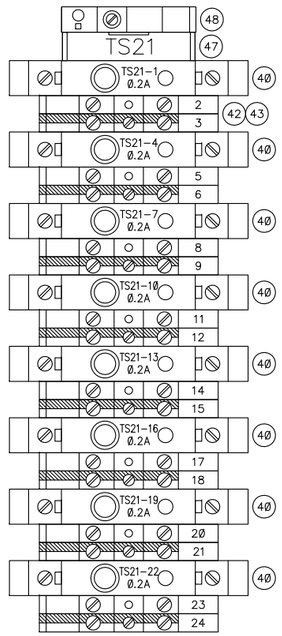
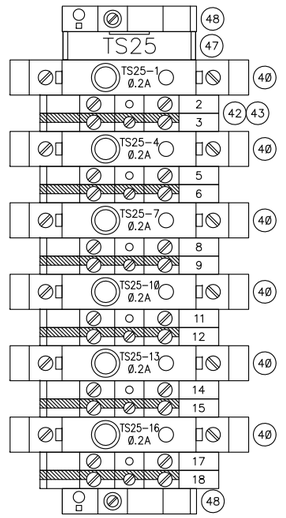


ANALOG INPUTS
TS21–TS23



ANALOG OUTPUTS
TS25

REV	DATE	DESCRIPTION	BY	APPV
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1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
TERMINAL BLOCK DETAIL

DRAWN BY: LDG | DATE: 12/4/12
CHECKED BY: ACS | SCALE: 1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 205.DWG
DWG NO: N0575_RR-SPB-PLC-060-205
6/24

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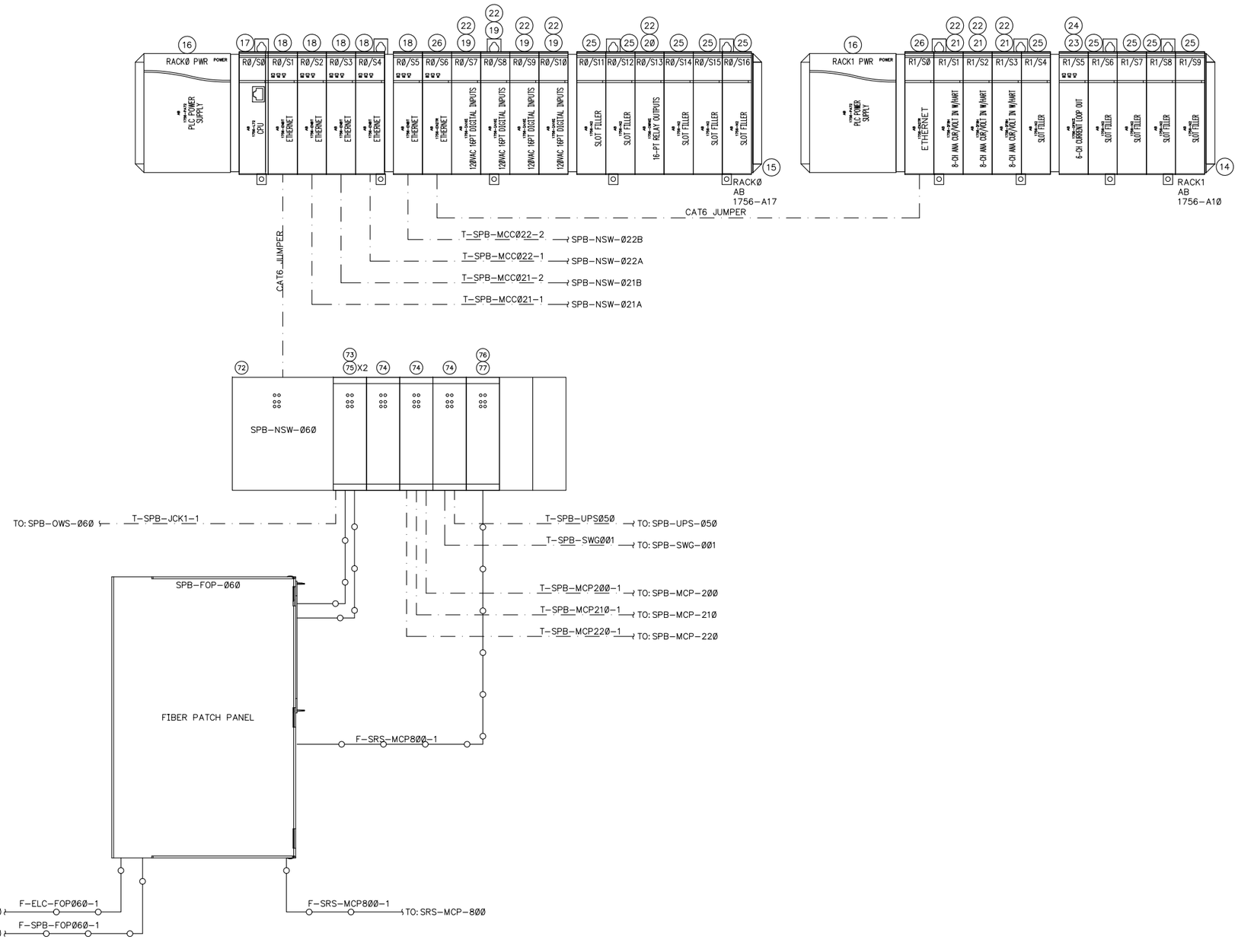

CABLE LEGEND

ETHERNET

FIBER OPTIC

MISC COMM. CABLE

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
COMMUNICATION DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	NTS

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	301.DWG
DWG NO:	N0575_RR-SPB-PLC-060-301

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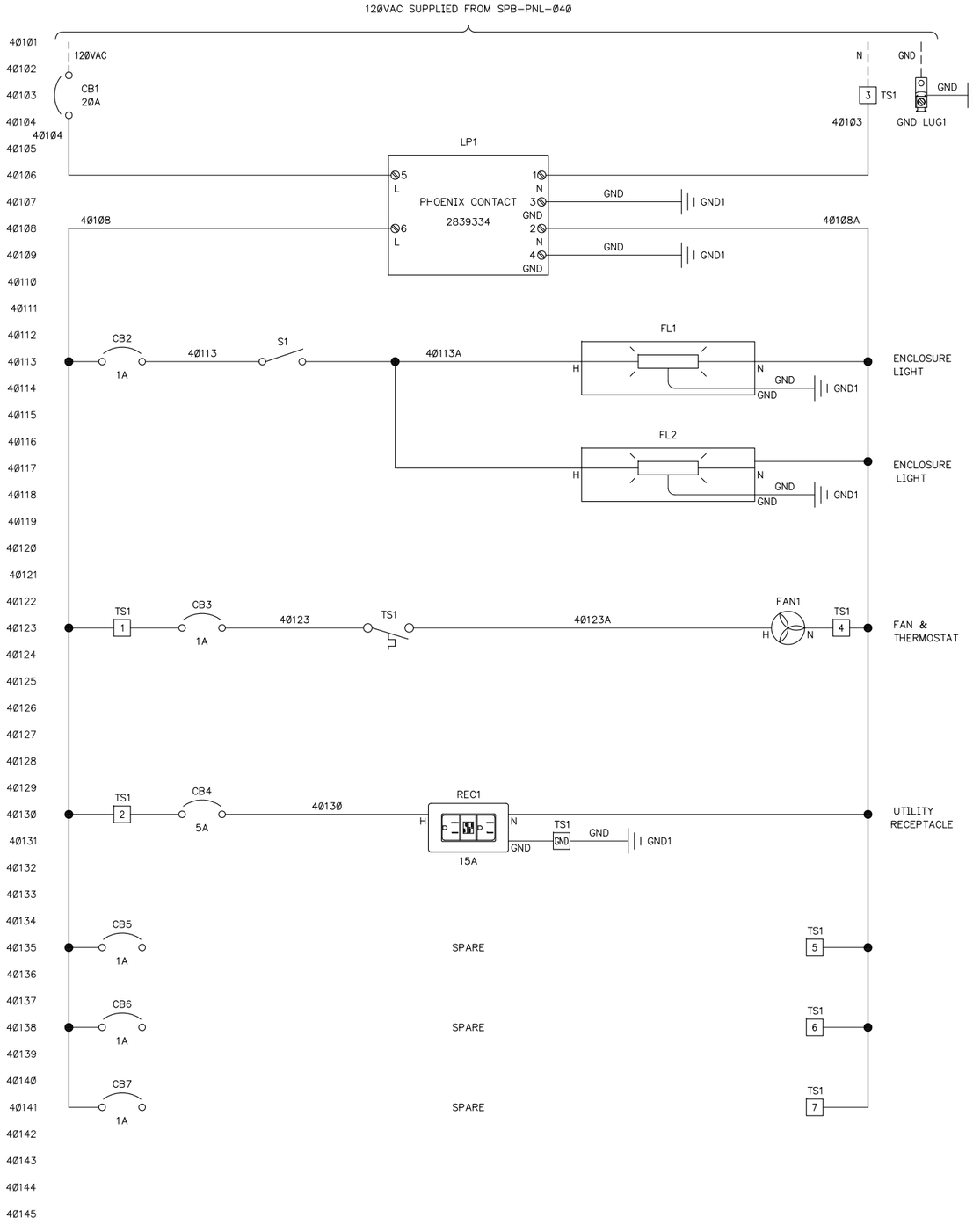

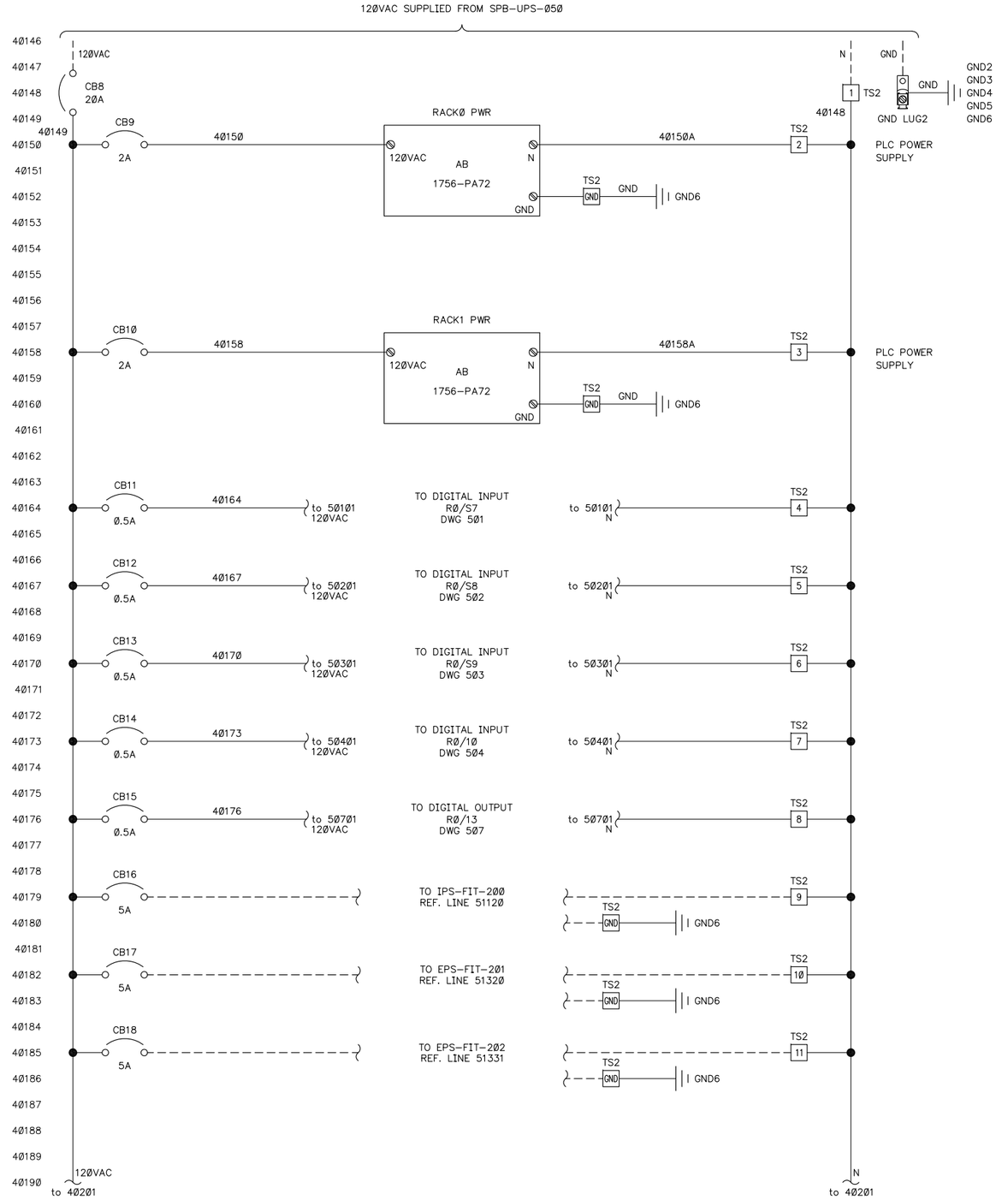

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
120VAC POWER DISTRIBUTION

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 401.DWG
DWG NO: N0575_RR-SPB-PLC-060-401
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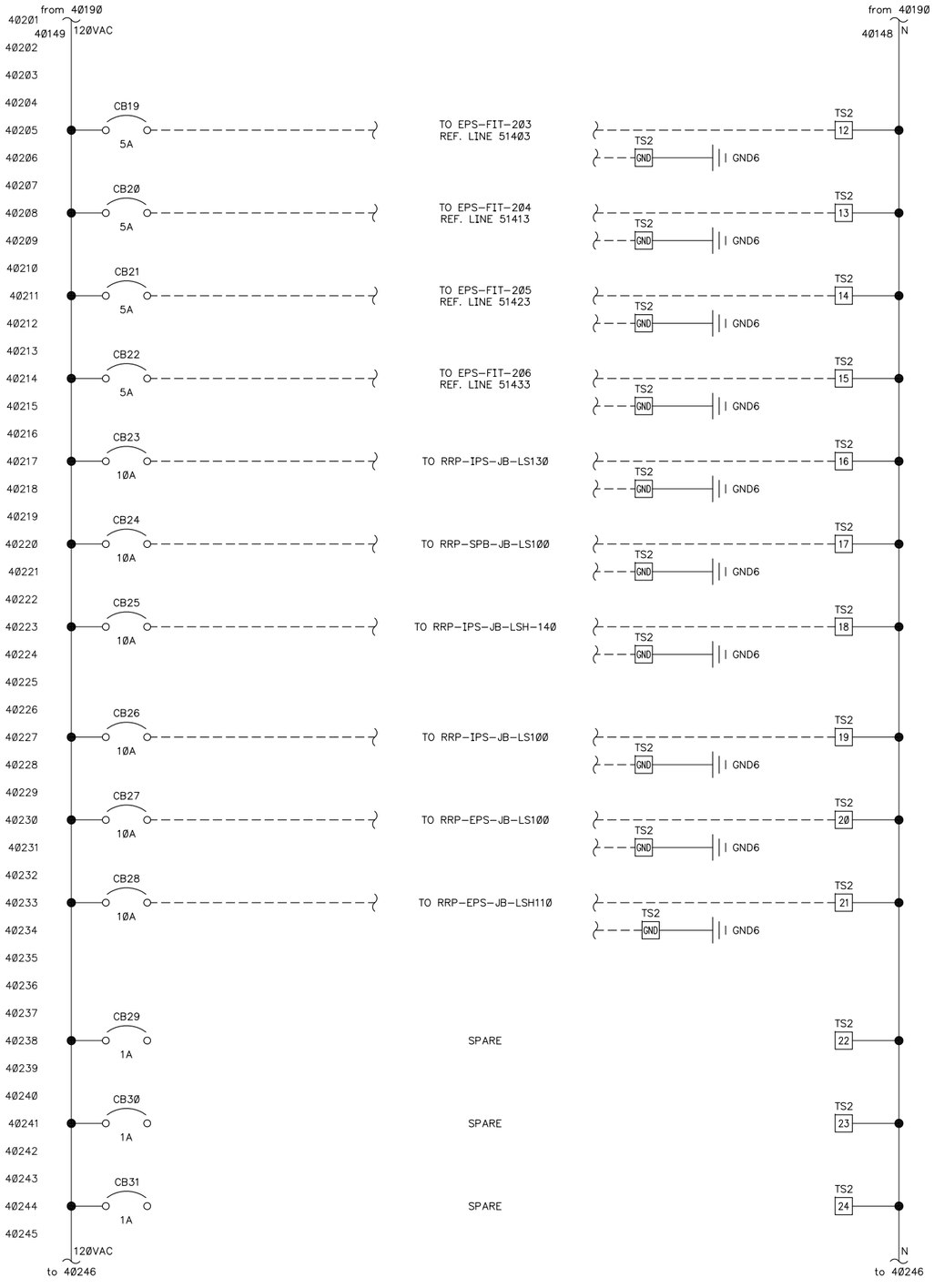

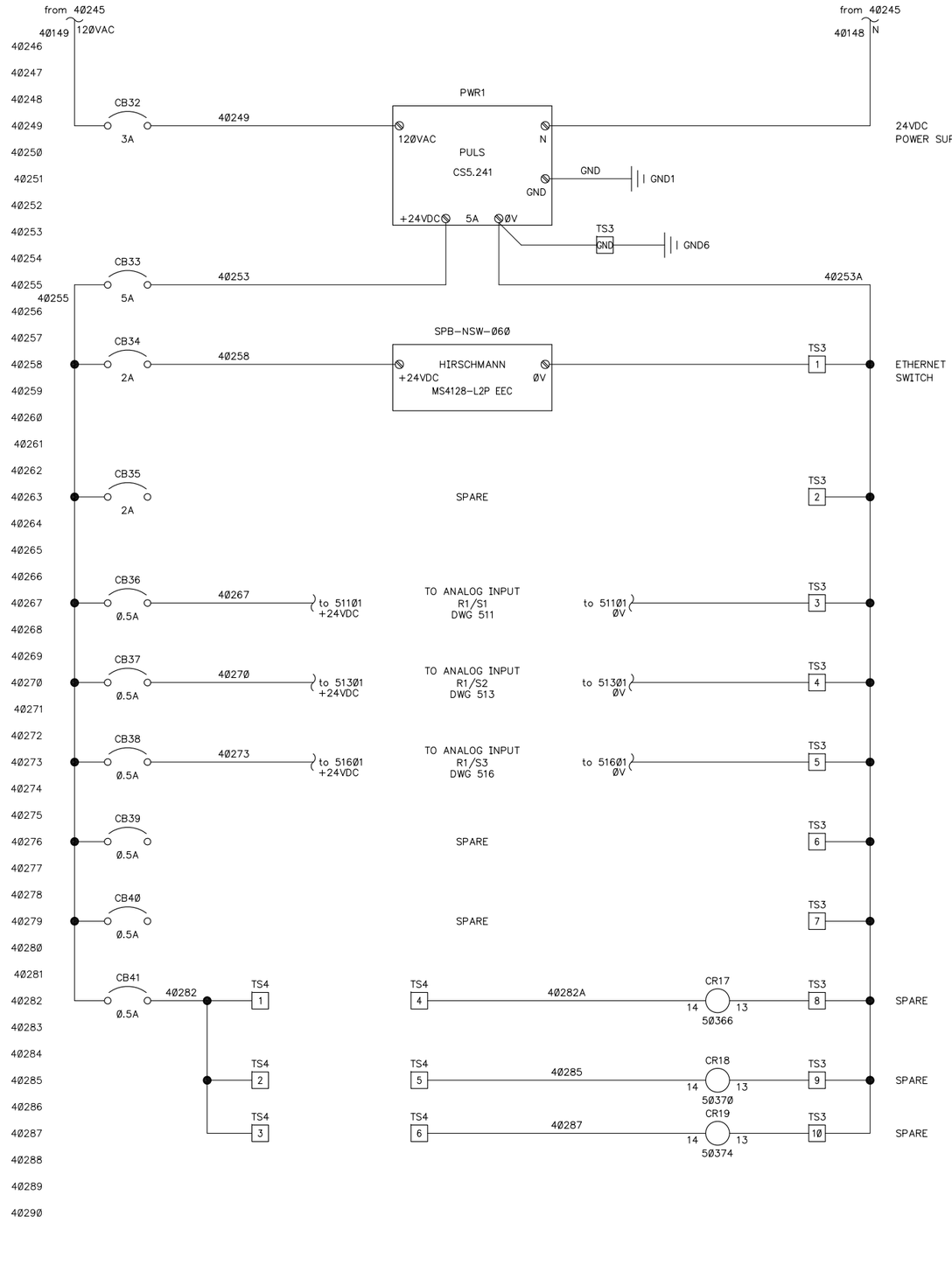

REV	DATE	DESCRIPTION	BY	APPV
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1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
POWER DISTRIBUTION

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	402.DWG
DWG NO:	N0575_RR-SPB-PLC-060-402

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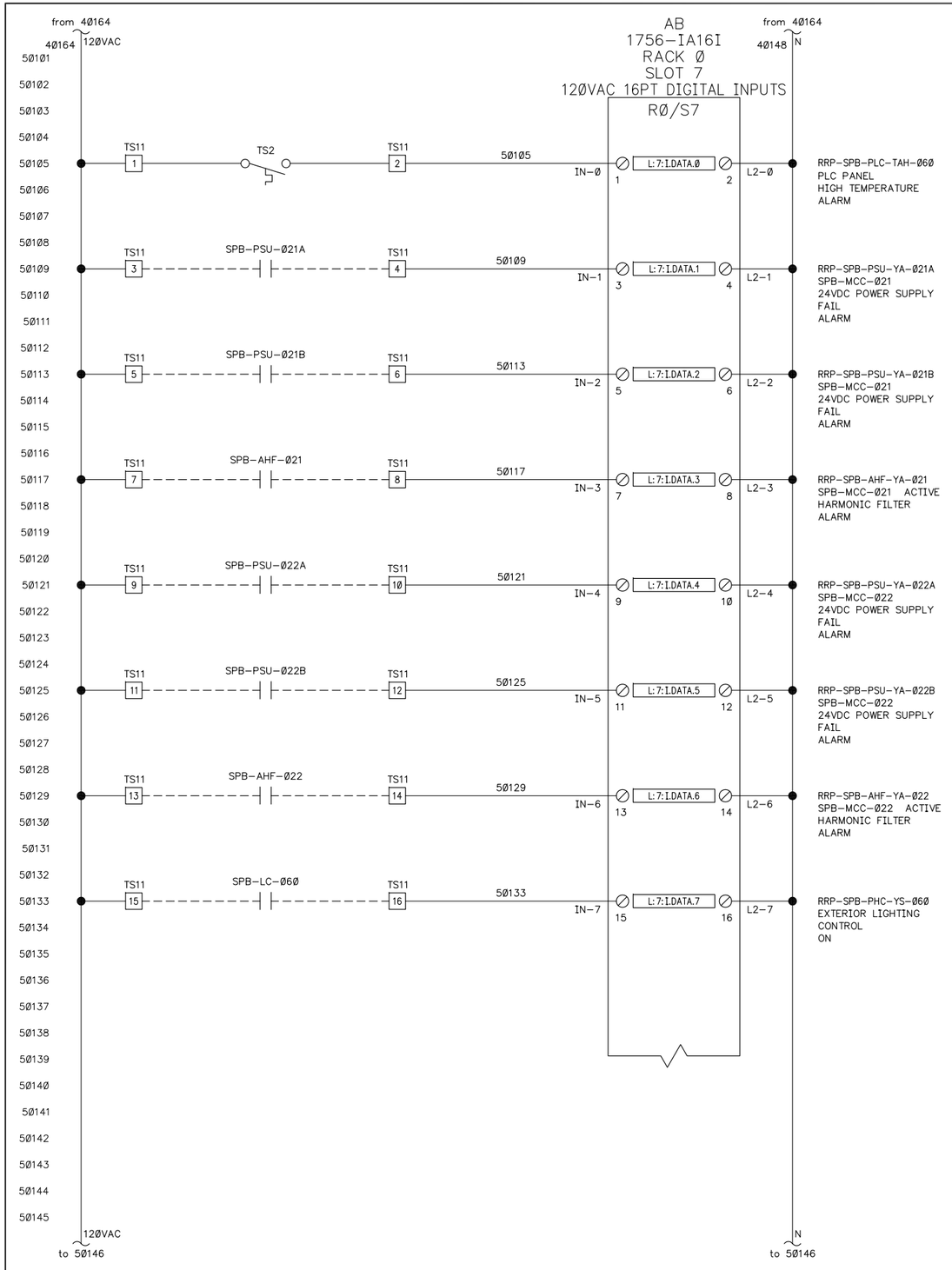

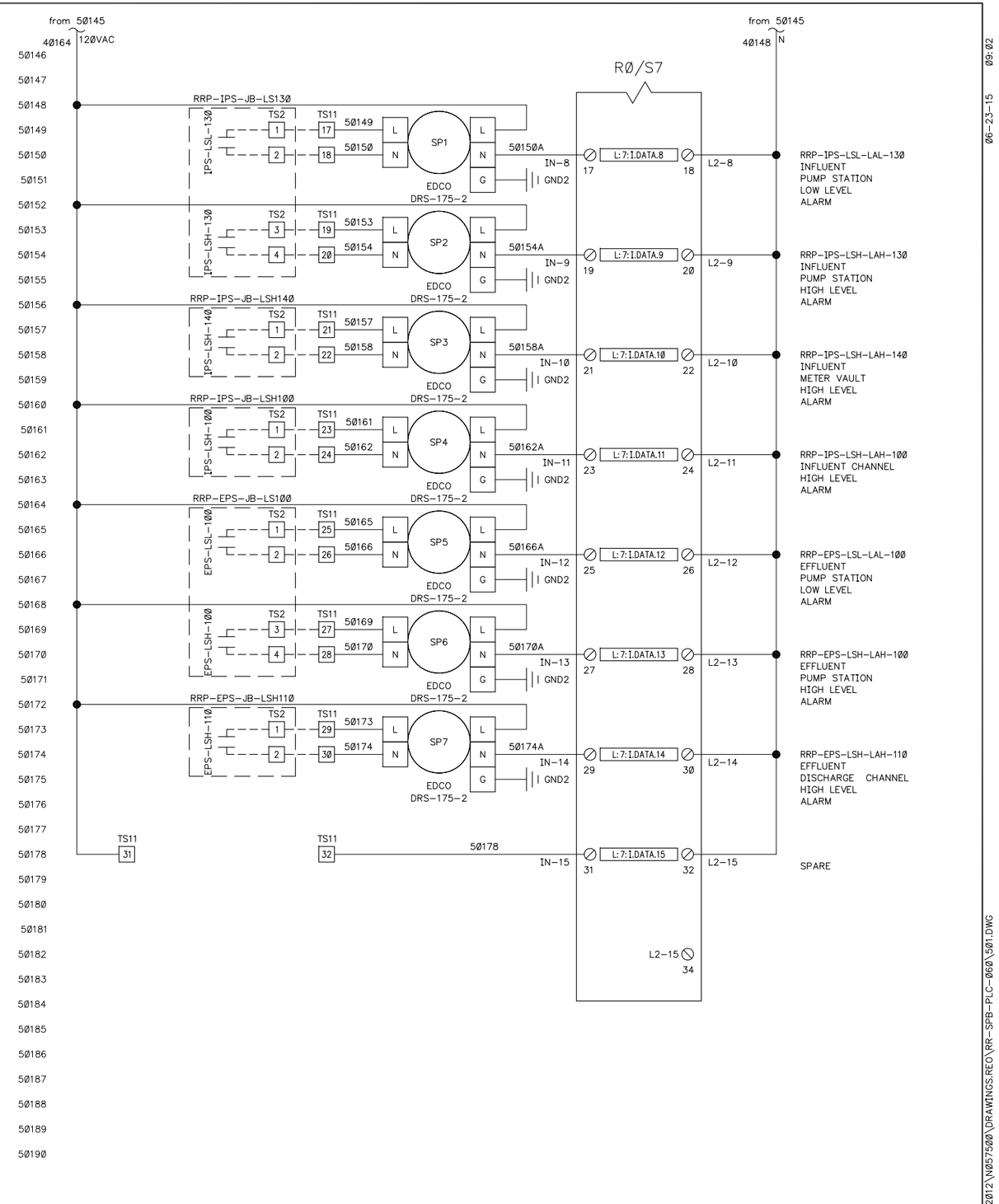

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
DIGITAL INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	501.DWG
DWG NO:	N0575_RR-SPB-PLC-060-501

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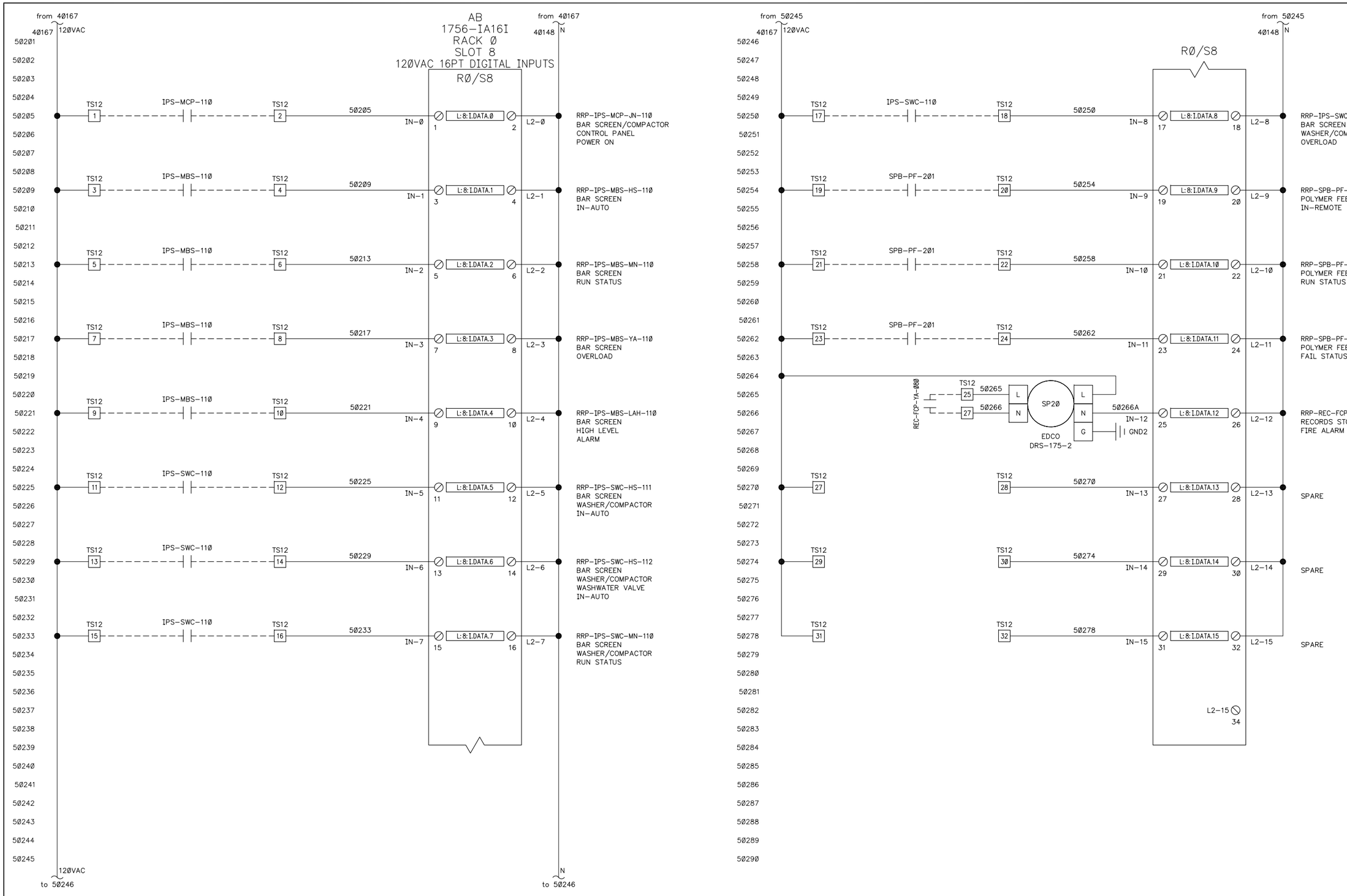

REV	DATE	DESCRIPTION	BY	APPV
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1	Ø1/27/15	FIELD REVISION	JEC	MLC
Ø	Ø5/Ø6/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
DIGITAL INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	502.DWG
DWG NO:	N0575_RR-SPB-PLC-060-502

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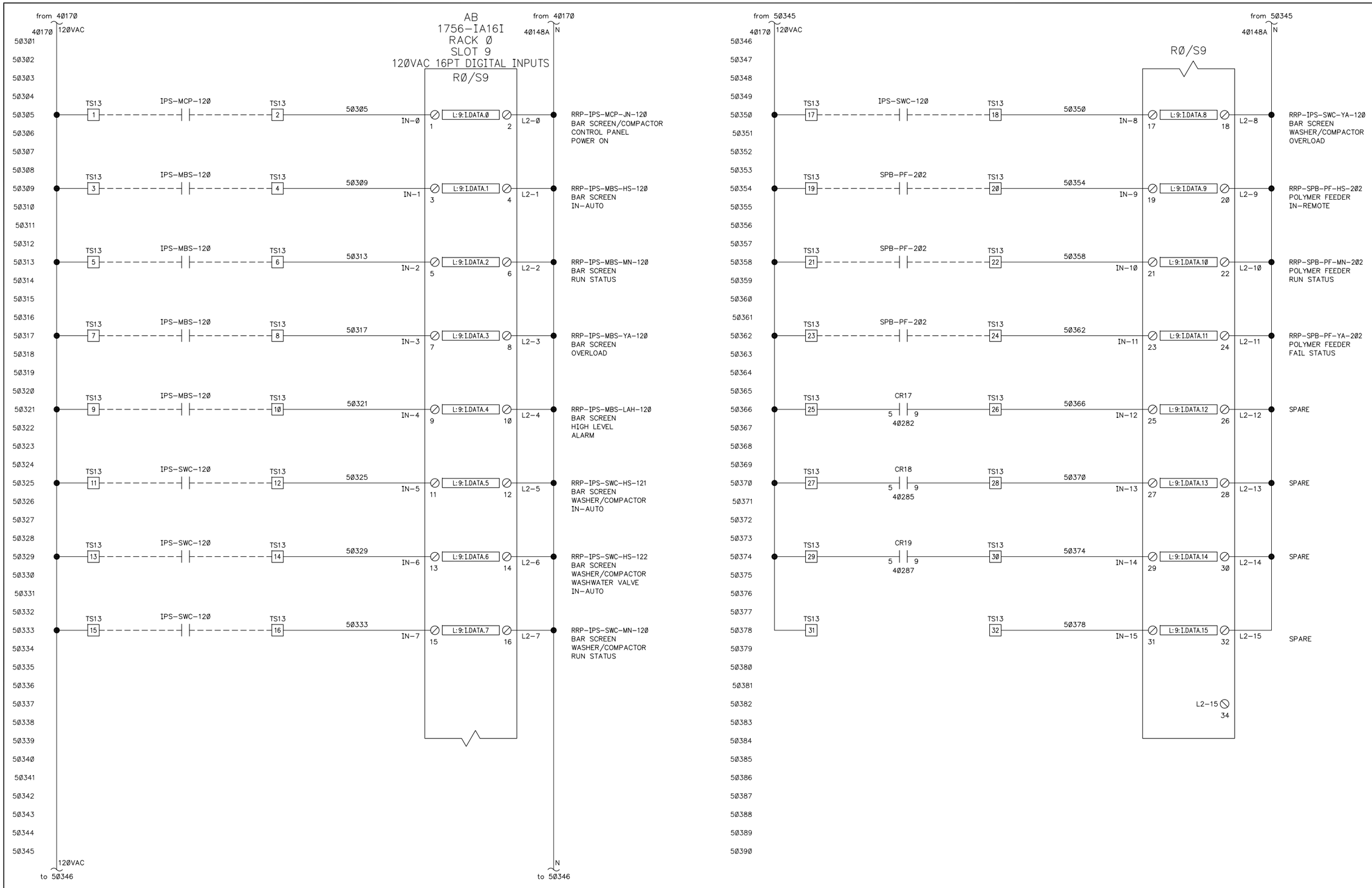

REV	DATE	DESCRIPTION	BY	APPV
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1	Ø1/27/15	FIELD REVISION	JEC	MLC
Ø	Ø5/Ø6/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
DIGITAL INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	503.DWG
DWG NO:	N0575_RR-SPB-PLC-060-503

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06-23-15

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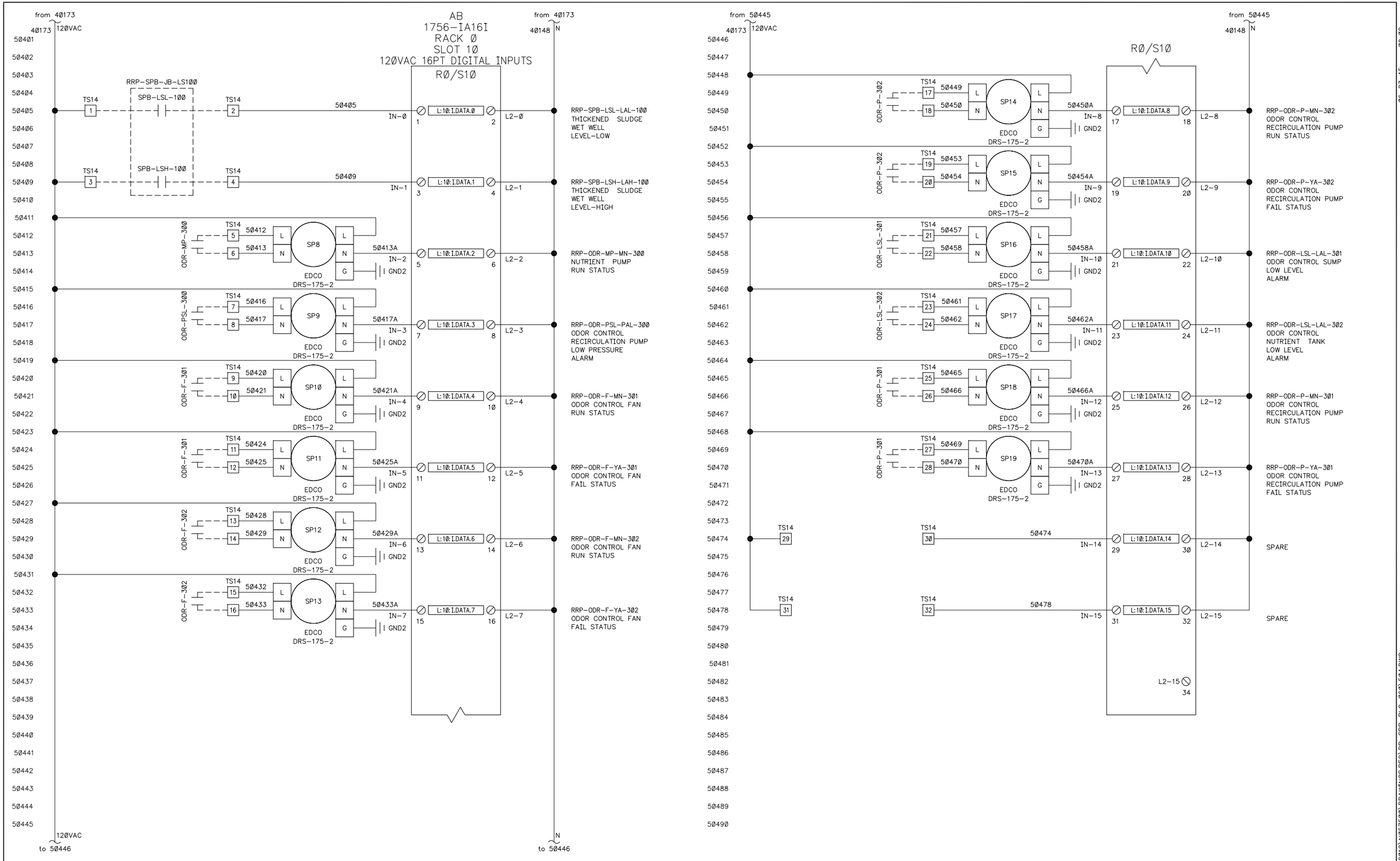

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
DIGITAL INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	504.DWG
DWG NO:	N0575_RR-SPB-PLC-060-504

13/24

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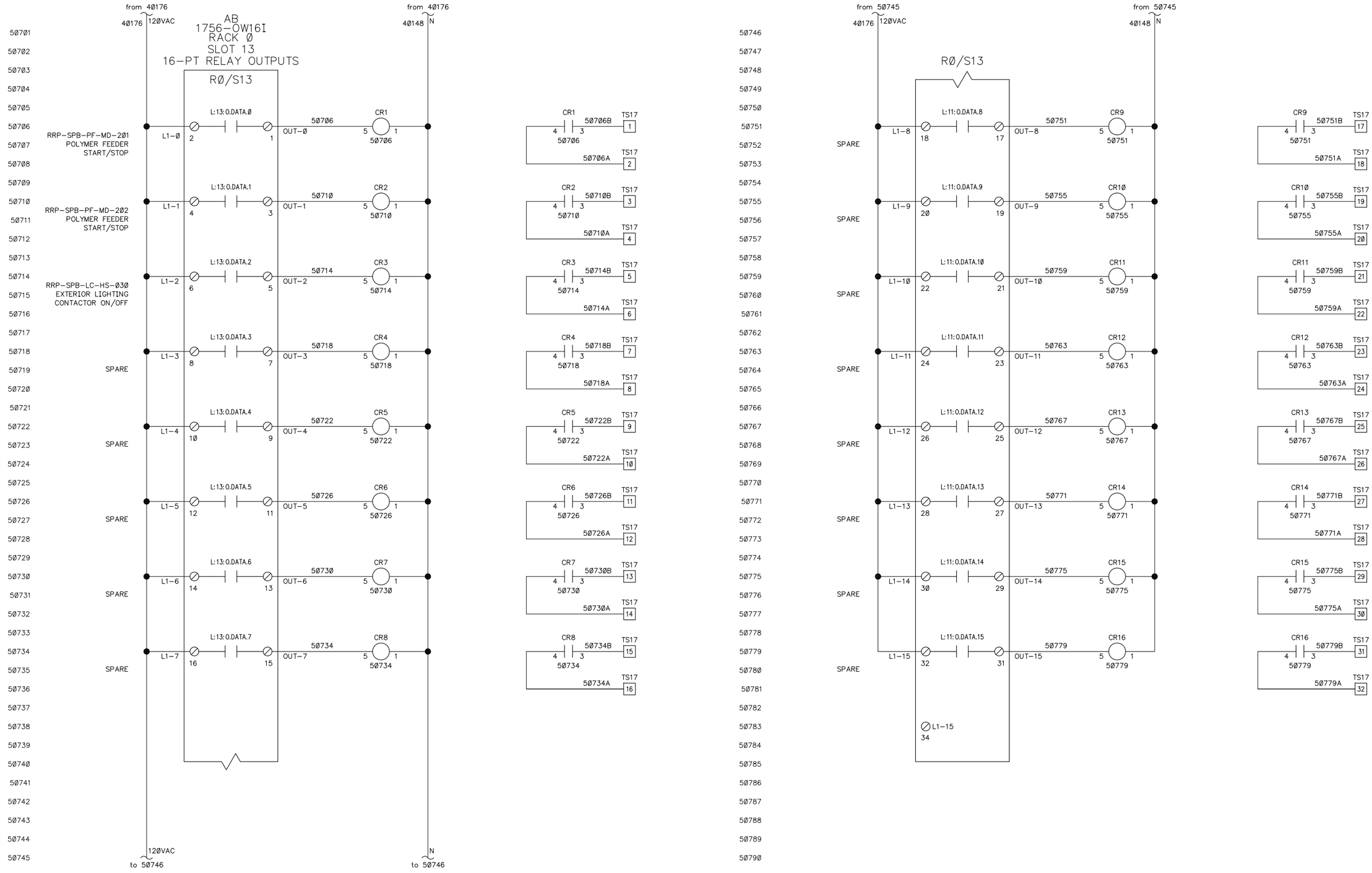

NOTES:

1. CONTACT RATING FOR DO CARD RELAYS (TYP): 2A @ 5–30V DC, 0.5A @ 48V DC, 0.25A @ 125V DC, 2A @ 125/240V AC.

2. RELAY CONTACT RATING: 12A RESISTIVE @ 250V AC, 7.5A INDUCTIVE

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
DIGITAL OUTPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 507.DWG
DWG NO: N0575_RR-SPB-PLC-060-507
14/24

09:02
06-23-15

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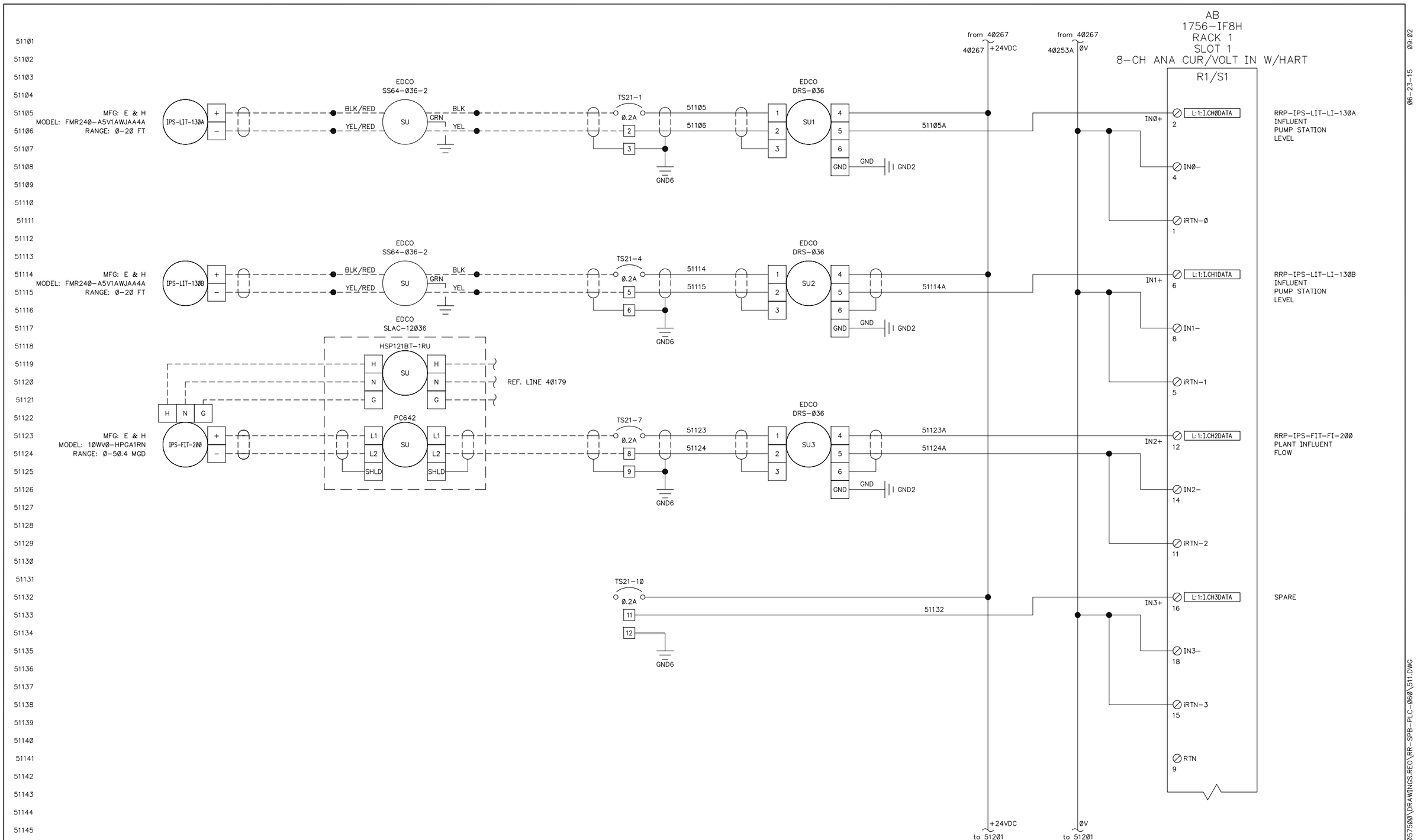

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1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	511.DWG
DWG NO:	N0575_RR-SPB-PLC-060-511

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06-23-15

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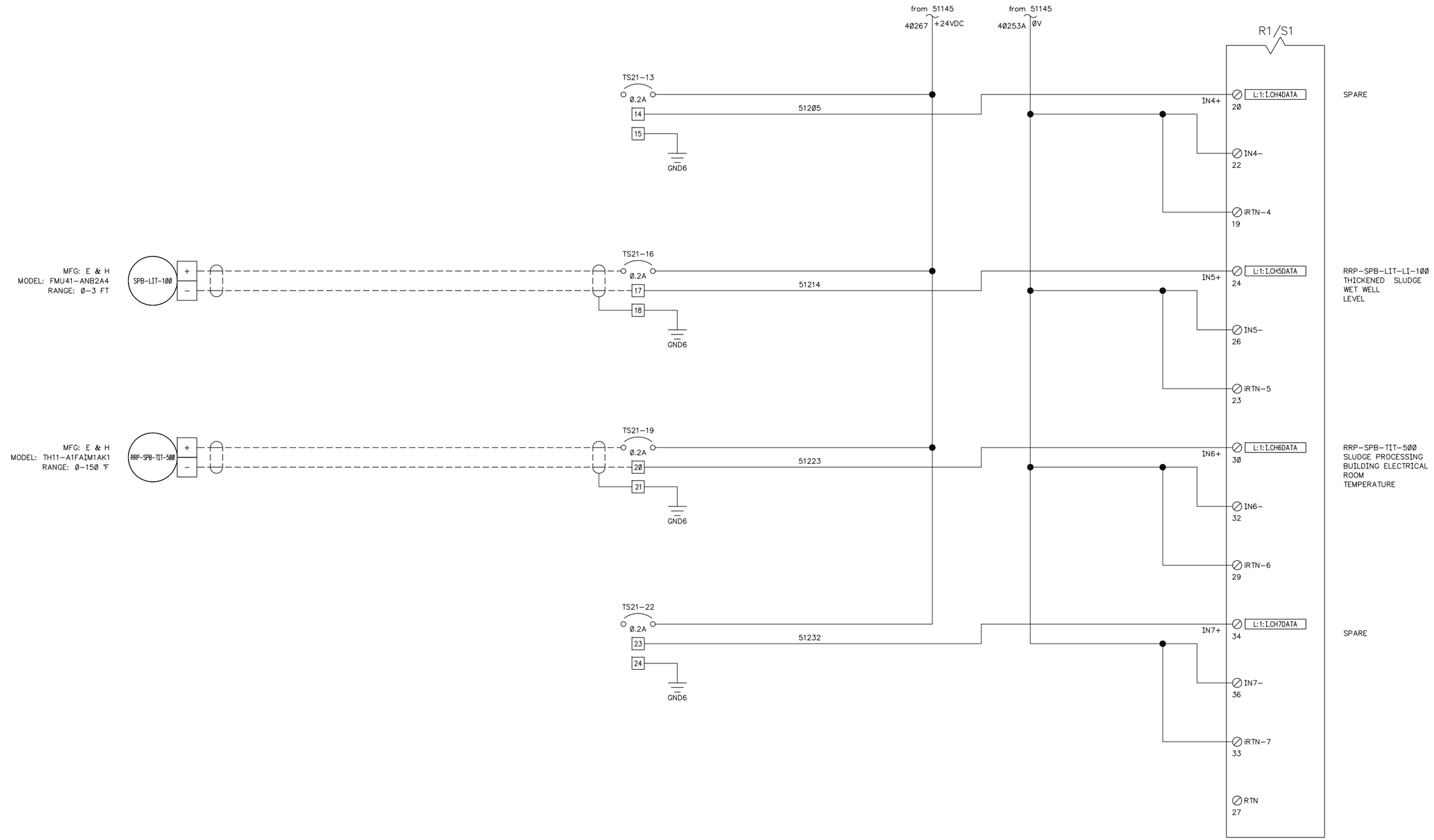

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
Ø	05/06/14	RECORD DRAWING	LDG	ACS

NOTICE:
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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	512.DWG

DWG NO: N0575_RR-SPB-PLC-060-512

09:02
06-23-15

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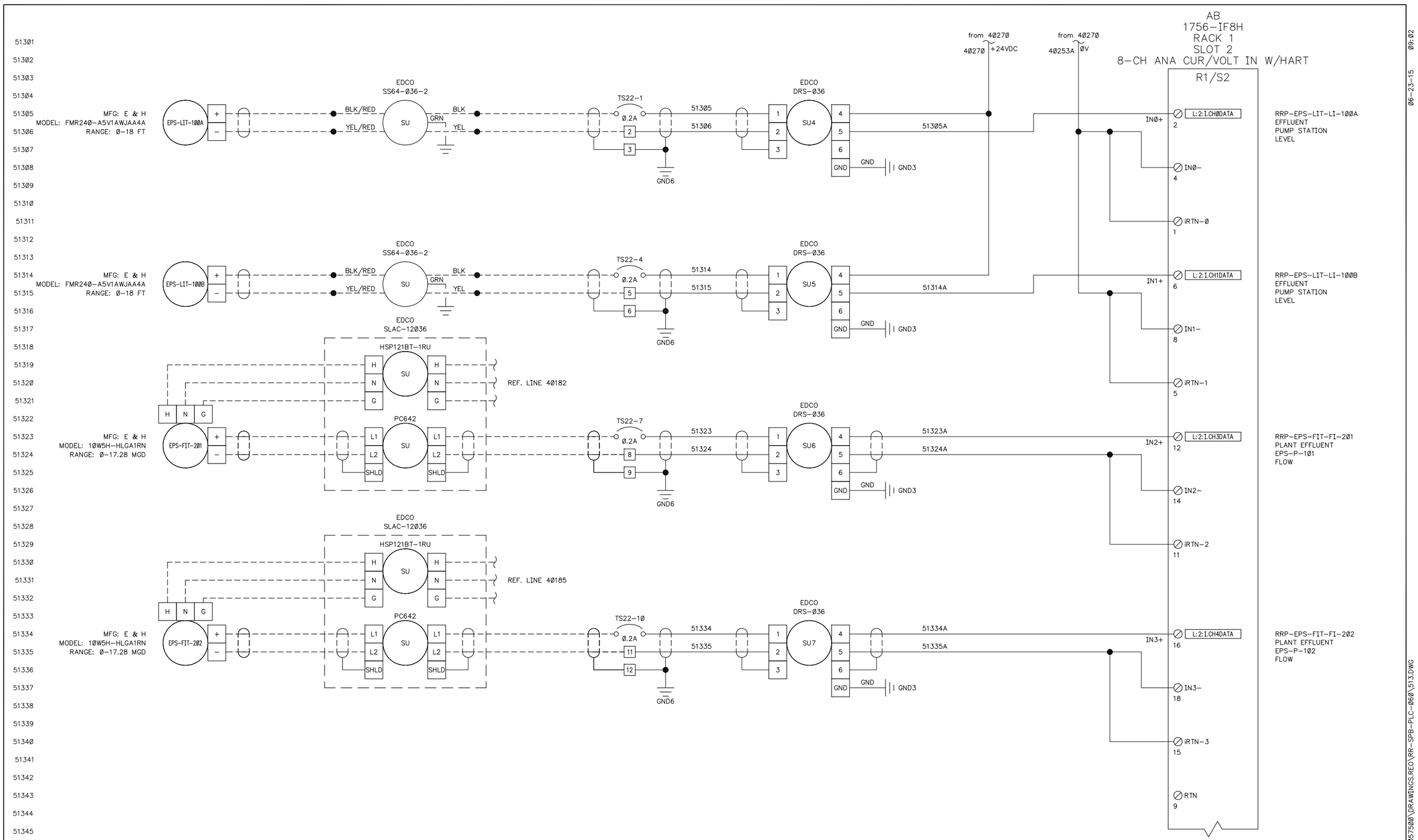

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
Ø	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG INPUT MODULE WIRING DIAGRAM

DRAWN BY: LDG | DATE: 12/4/12
CHECKED BY: ACS | SCALE: 1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 513.DWG
DWG NO: N0575_RR-SPB-PLC-060-513
17/24

09:02
06-23-15

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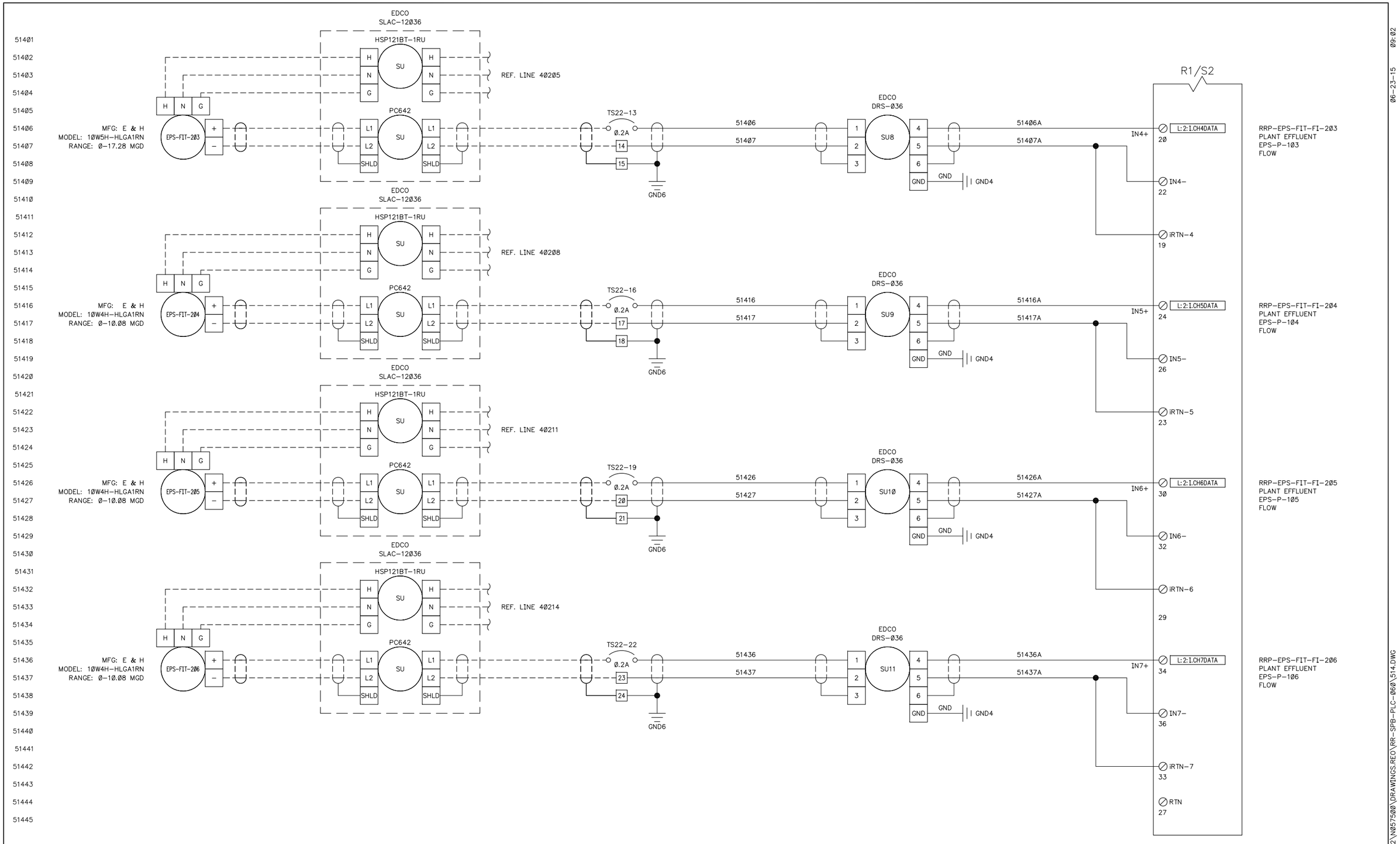

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG INPUT MODULE WIRING DIAGRAM

DRAWN BY: LDG | DATE: 12/4/12
CHECKED BY: ACS | SCALE: 1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 514.DWG
DWG NO: N0575_RR-SPB-PLC-060-514
18/24

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06-23-15

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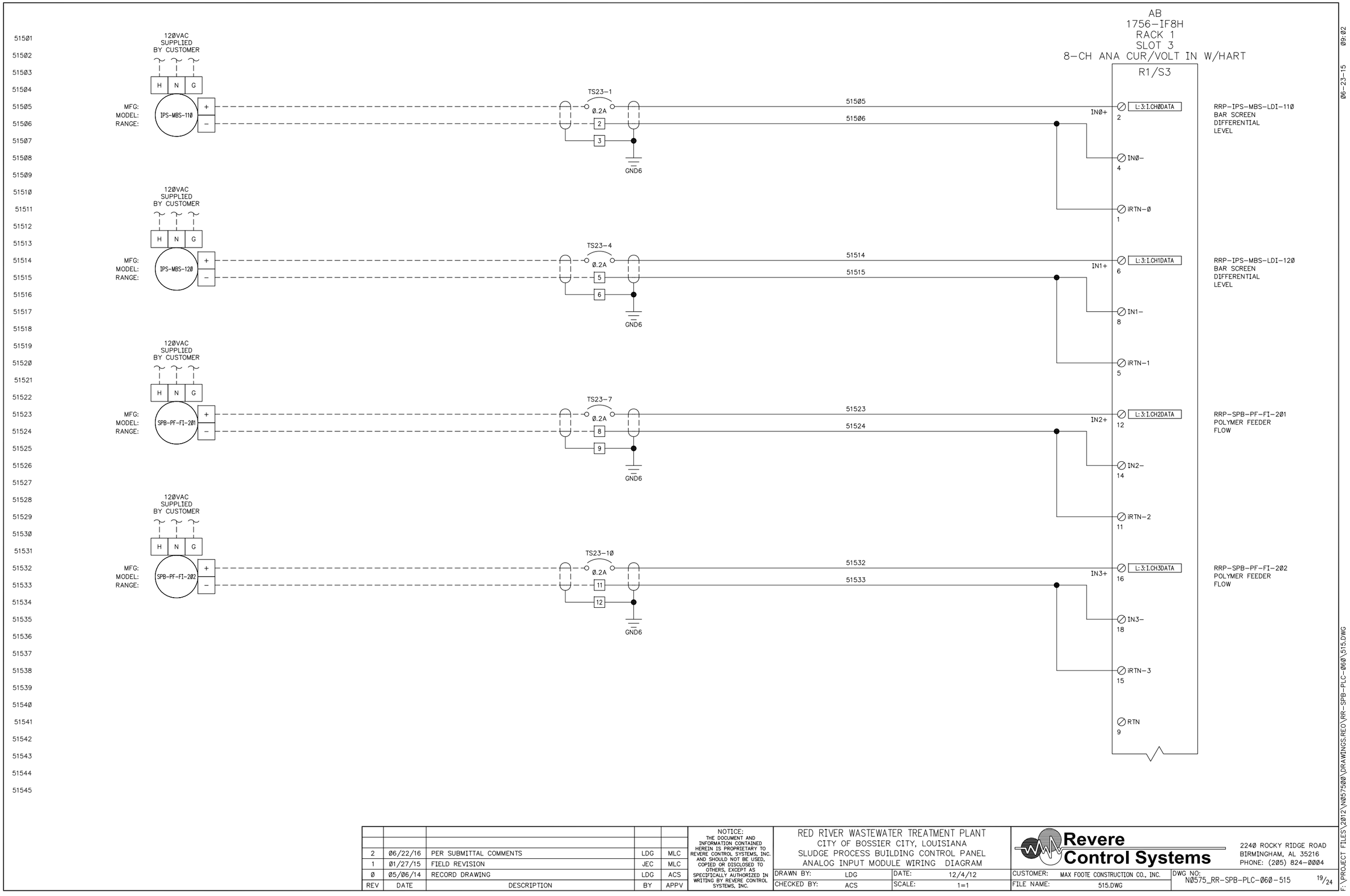

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	515.DWG

DWG NO: N0575_RR-SPB-PLC-060-515

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06-23-15

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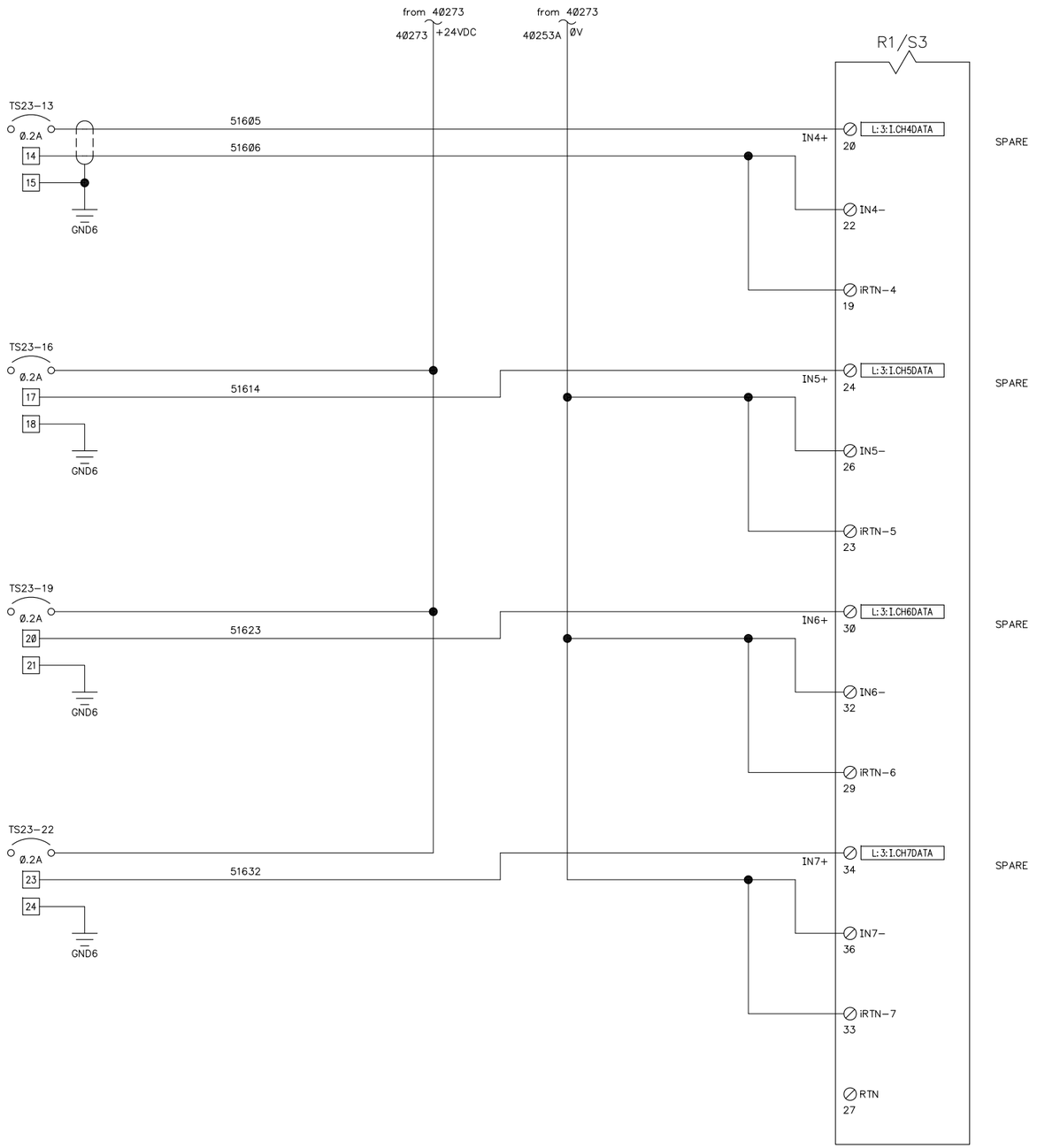

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG INPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER:	MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME:	516.DWG

DWG NO: N0575_RR-SPB-PLC-060-516

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06-23-15

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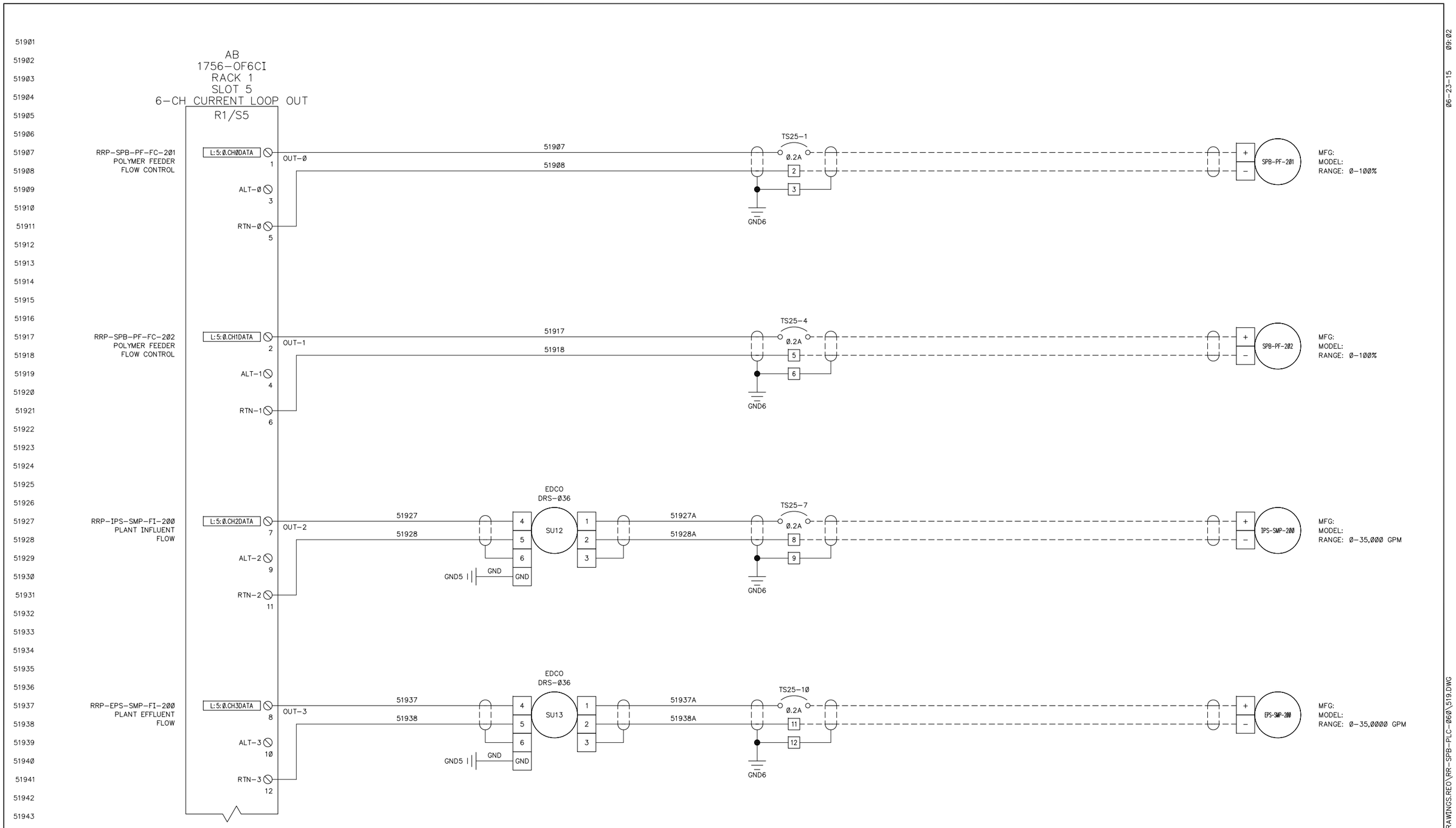

NOTES:

1. USE RTN-Ø FOR LOADS OF Ø-55Ø OHMS.
2. USE ALT-Ø FOR LOADS OF 551-1ØØØ OHMS.

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	Ø1/27/15	FIELD REVISION	JEC	MLC
Ø	Ø5/Ø6/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG OUTPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 519.DWG
DWG NO: N0575_RR-SPB-PLC-060-519
21/24

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06-23-15

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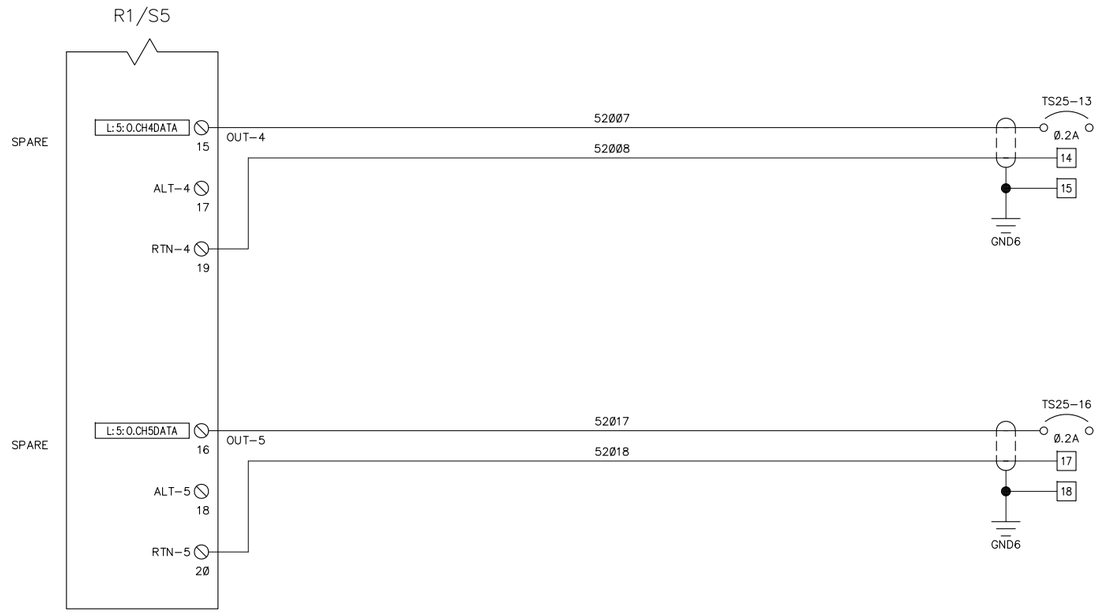

NOTES:

1. USE RTN-Ø FOR LOADS OF Ø-55Ø OHMS.
2. USE ALT-Ø FOR LOADS OF 551-1ØØØ OHMS.

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
ANALOG OUTPUT MODULE WIRING DIAGRAM

DRAWN BY:	LDG	DATE:	12/4/12
CHECKED BY:	ACS	SCALE:	1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 520.DWG
DWG NO: N0575_RR-SPB-PLC-060-520
22/24

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06-23-15
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ELECTRICAL SCHEMATIC SYMBOLS

PUSHBUTTONS			SELECTOR SWITCHES		PILOT LIGHTS		SWITCH
NORMALLY OPEN	NORMALLY CLOSED	MUSHROOM HEAD	2 POSITION	3 POSITION	STANDARD	PUSH-TO-TEST	TOGGLE SWITCH
			OX	OXX	R	R	

LIMIT SWITCHES				PROXIMITY SWITCHES		LEVEL SWITCHES	
NORMALLY OPEN	NORMALLY CLOSED	HELD OPEN	HELD CLOSED	NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED

PRESSURE SWITCHES		TEMPERATURE SWITCHES		FLOW SWITCHES		FOOT SWITCHES	
NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED

TIME DELAY CONTACTS				RELAY CONTACTS		RELAYS, TIMING RELAYS	
ON DELAY NORMALLY OPEN	ON DELAY NORMALLY CLOSED	OFF DELAY NORMALLY OPEN	OFF DELAY NORMALLY CLOSED	NORMALLY OPEN	NORMALLY CLOSED	COIL	SOLENOID

CIRCUIT PROTECTORS AND DISCONNECTS				MOTOR CONTROL			
CIRCUIT BREAKER	FUSE	FUSED DISCONNECT	DISCONNECT SWITCH	3 PHASE MOTOR	THERMAL OVERLOAD		

MISC SYMBOLS							
TERMINAL BLOCK	GROUND	RESISTOR	DIODE				
HORN	HEATER	FAN	POTENTIOMETER	BATTERY	SHIELDED CABLE	PLUG/JACK	NODE

MANUFACTURING NOTES:

1. ALL PANEL WIRING WILL REQUIRE WIRE TAGS.

DEVICE AND COMPONENT DESIGNATIONS

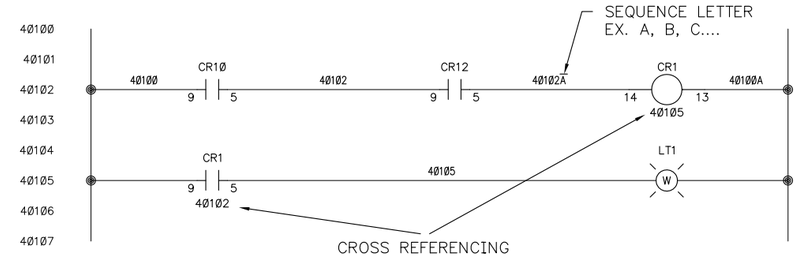
DESIGNATION	DEVICE
AH	ALARM OR ANNUNCIATOR HORN
AIT	ANALYZER INDICATING TRANSMITTER
ANLT	ALARM OR ANNUNCIATOR LIGHT
AM	AMP METER
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CBL	CABLES
CR	CONTROL RELAY
CRL	CONTROL RELAY, LATCH
CRU	CONTROL RELAY, UNLATCH
CT	CURRENT TRANSFORMER
CTR	COUNTER
D	DIODE
DISC	DISCONNECT SWITCH
FIT	FLOW INDICATING TRANSMITTER
FL	FLUORESCENT LIGHT
FLS	FLOW SWITCH
FN	FAN
FS	FLOAT SWITCH
FTS	FOOT SWITCH
FU	FUSE
GND	GROUND
HTR	HEATER
LIT	LEVEL INDICATING TRANSMITTER
LP	LINE PROTECTOR
LS	LIMIT SWITCH
LT	LIGHT
M	MOTOR STARTER
MOT	MOTOR
MTR	METER
NP	NAMEPLATE
OL	OVERLOAD
PB	PUSHBUTTON
PE	PHOTO ELECTRIC SWITCH
PIT	PRESSURE INDICATING TRANSMITTER
PJ	PLUG/JACK
POT	POTENTIOMETER
PS	PRESSURE SWITCH
PWR	POWER SUPPLY
PRS	PROXIMITY SWITCH
REC	RECEPTACLE
R	RESISTOR
SOL	SOLENOID
SS	SELECTOR SWITCH
SU	SURGE SUPPRESSOR
S	SWITCH
TB	TERMINAL BLOCK
TC	THERMOCOUPLE
TG	TOGGLE SWITCH
TR	TIMING RELAY
XF	TRANSFORMER

LINE REFERENCING

PAGE NUMBER — LINE NUMBER

4Ø139

CROSS REFERENCING AND WIRE NUMBERING



WIRING KEY (UNLESS OTHERWISE NOTED)			
120VAC			TYPE
SUPPLY	BLACK	12 AWG	MTW, 6ØØV@9Ø°C
RETURN	WHITE	12 AWG	MTW, 6ØØV@9Ø°C
GROUNDED	GREEN	12 AWG	MTW, 6ØØV@9Ø°C
SIGNAL/CONTROL	RED	16 AWG	MTW, 6ØØV@9Ø°C
SIGNAL/CONTROL RETURN	WHITE	16 AWG	MTW, 6ØØV@9Ø°C
EXTERNAL SOURCE	ORANGE	14 AWG	MTW, 6ØØV@9Ø°C
24VDC			TYPE
SUPPLY	BLUE	16 AWG	MTW, 6ØØV@9Ø°C
RETURN	WHITE/BLUE	16 AWG	MTW, 6ØØV@9Ø°C
GROUNDED	GREEN	16 AWG	MTW, 6ØØV@9Ø°C
CONTROL	BLUE	16 AWG	MTW, 6ØØV@9Ø°C
SIGNAL	BLACK/WHITE	18 AWG/SHLD	MTW, 6ØØV@9Ø°C
PANEL WIRING			
FIELD WIRING			

REV	DATE	DESCRIPTION	BY	APPV
2	Ø6/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
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Ø	Ø5/Ø6/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
GENERAL INFORMATION LEGEND

DRAWN BY: LDG | DATE: 12/4/12
CHECKED BY: ACS | SCALE: 1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 901.DWG
DWG NO: N0575_RR-SPB-PLC-060-901
23/24

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06-23-15

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PANEL LABEL LEGEND

(L1)

Revere Control Systems
ENGINEERING TO SERVE
2240 Rocky Ridge Rd., Birmingham, AL 35216
205.824.0004; Fax 205.824.0408; www.reverecontrol.com
csia CERTIFIED

Serial Number: N0575_RR-SPB-PLC-060 Customer ID:

Line Voltage: Phase: Source: Frequency:

Control Voltage: 120VAC Largest Motor: Total F.L.A.:

Wired By: Tested By: Date:

Revere Control Systems Contact: D. ABEL

Ref. Drawing: N0575_RR-SPB-PLC-060 Enclosure Type: 12

Short Circuit Current Rating:

(L2)

TO MAINTAIN ENCLOSURE RATING, USE HUBS OR FITTINGS WITH THE SAME ENVIRONMENTAL RATING AS THE ENCLOSURE.
O-Z/Gedney-CHM Series, Hubs Appleton- HUB Series Hubs, T&B- H Series Hubs

(L3)

C UL US LISTED
ENCLOSED INDUSTRIAL CONTROL PANEL
No.

(L4)

CAUTION

THIS EQUIPMENT IS SUPPLIED BY MORE THAN ONE POWER SOURCE

(L6)

USE COPPER CONDUCTORS ONLY RATED AT 60°C OR HIGHER.

(L7)

USE COPPER CONDUCTORS ONLY RECOMMENDED TORQUE: 5.3 IN. LB.

(L8)

USE COPPER CONDUCTORS ONLY RECOMMENDED TORQUE: 8.9 IN. LB.

REV	DATE	DESCRIPTION	BY	APPV
2	06/22/16	PER SUBMITTAL COMMENTS	LDG	MLC
1	01/27/15	FIELD REVISION	JEC	MLC
0	05/06/14	RECORD DRAWING	LDG	ACS

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RED RIVER WASTEWATER TREATMENT PLANT
CITY OF BOSSIER CITY, LOUISIANA
SLUDGE PROCESS BUILDING CONTROL PANEL
LABEL LEGEND

DRAWN BY: LDG DATE: 12/4/12
CHECKED BY: ACS SCALE: 1=1

Revere Control Systems
2240 ROCKY RIDGE ROAD
BIRMINGHAM, AL 35216
PHONE: (205) 824-0004

CUSTOMER: MAX FOOTE CONSTRUCTION CO., INC.
FILE NAME: 902.DWG
DWG NO: N0575_RR-SPB-PLC-060-902
24/24

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06-23-15
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